

AIRCRAFT OF
THE ACES®

129



Yasuho Izawa
with Tony Holmes

J2M RAIDEN AND N1K1/2 SHIDEN/ SHIDEN-KAI ACES



MARK POSTLETHWAITE '15

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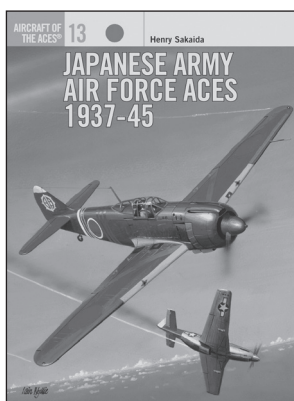
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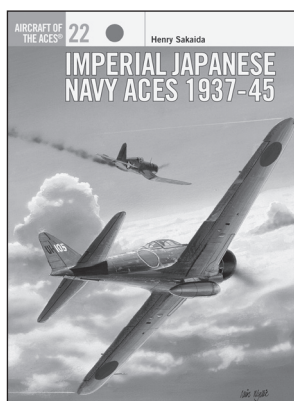
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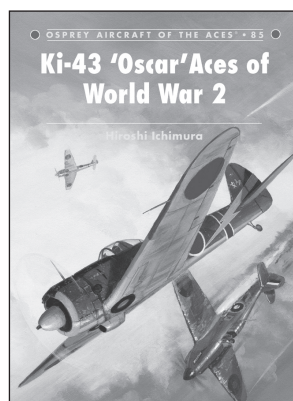
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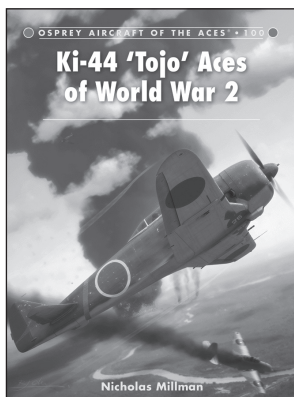
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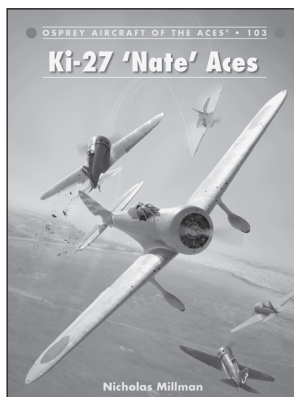
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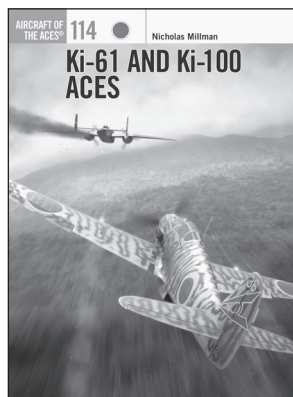
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ACE No: 100 • ISBN: 978 1 84908 440 6



ACE No: 103 • ISBN: 978 1 84908 662 2

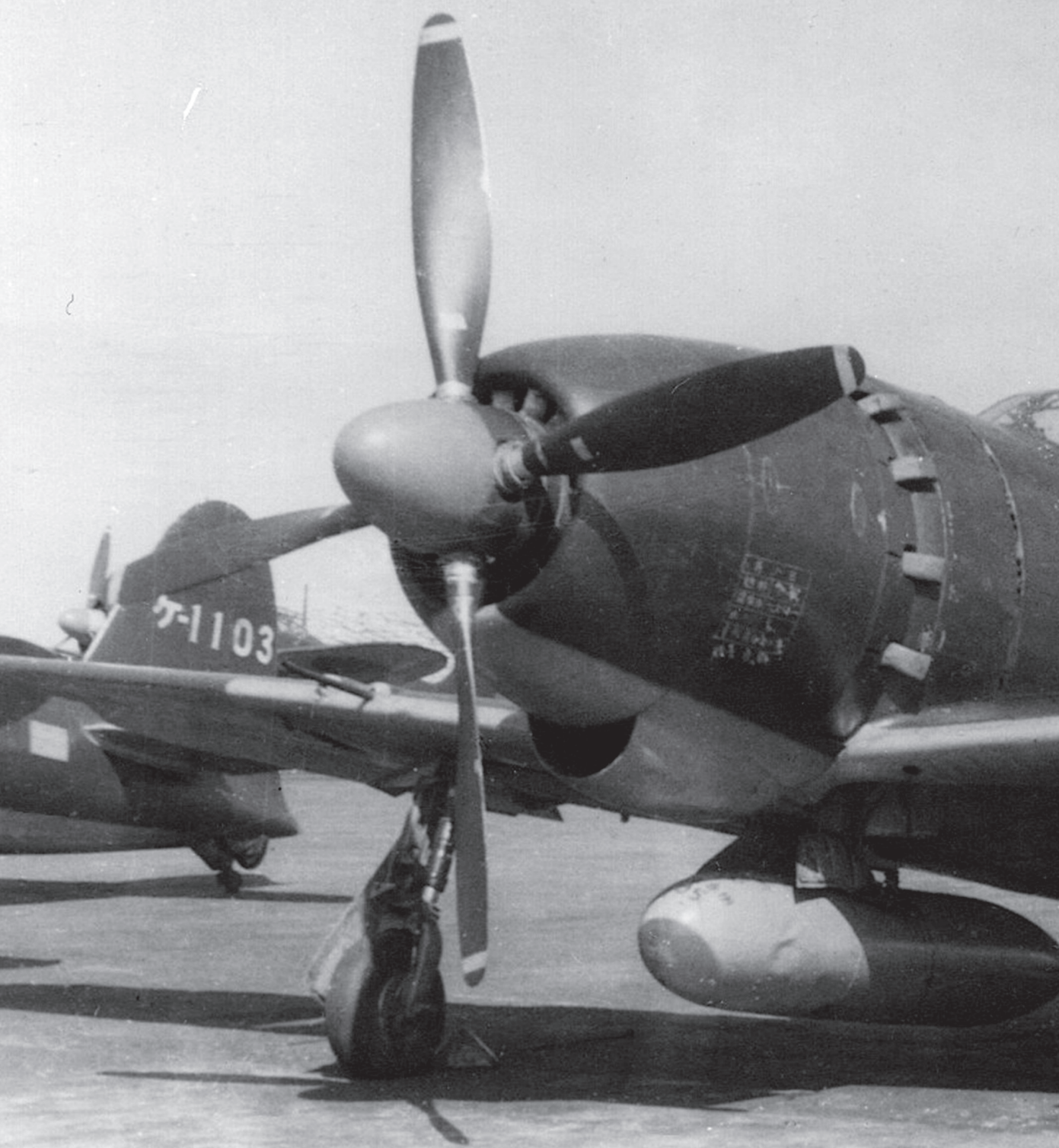


ACE No: 114 • ISBN: 978 1 78096 295 5

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SERIES EDITOR TONY HOLMES

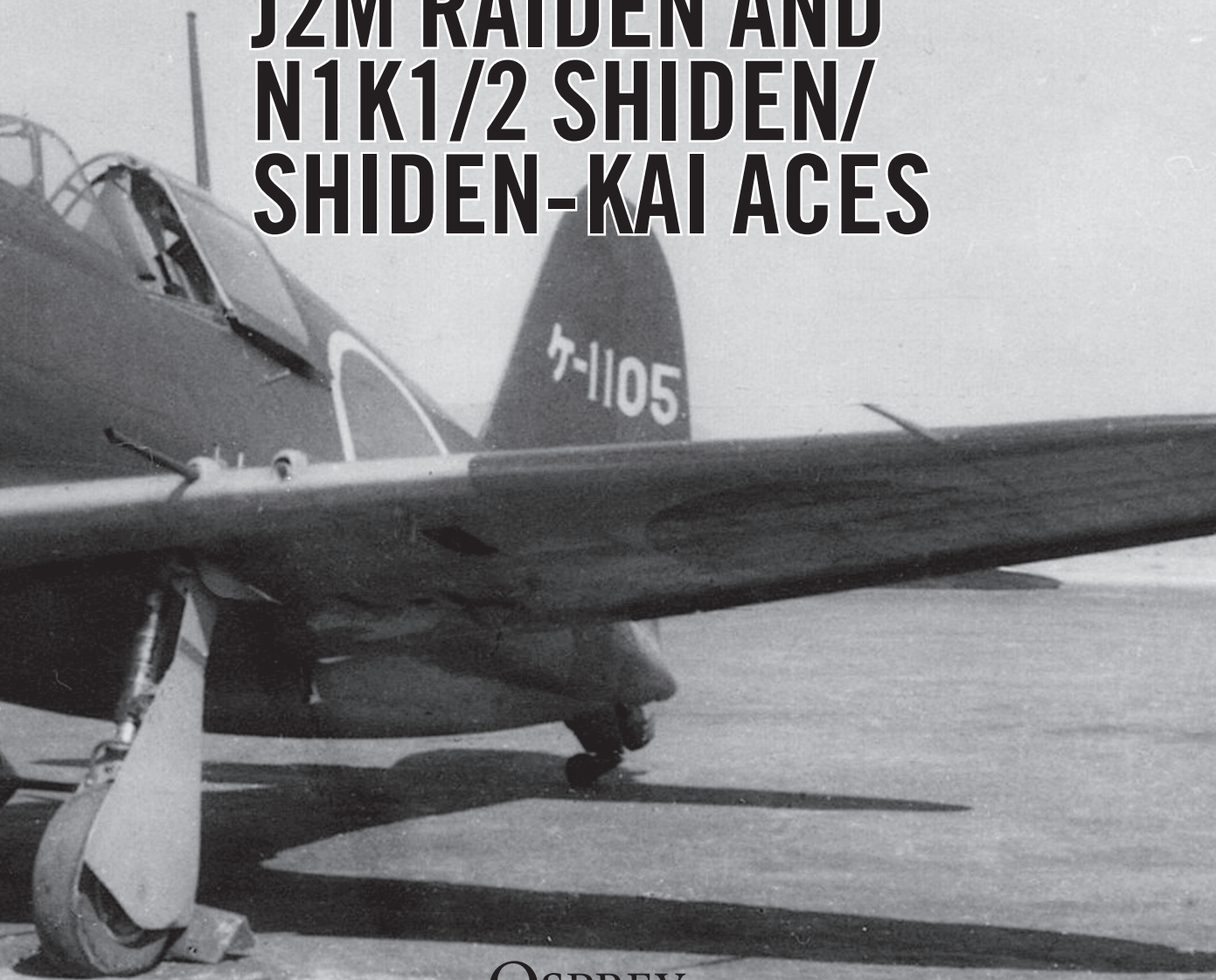
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OSPREY
PUBLISHING

This electronic edition published in 2016 by Bloomsbury Publishing Plc

First published in Great Britain in 2016 by Osprey Publishing

PO Box 883, Oxford, OX1 9PL, UK

PO Box 3985, New York, NY 10185-3985, USA

E-mail: info@ospreypublishing.com

Osprey Publishing, part of Bloomsbury Publishing Plc

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A CIP catalogue record for this book is available from the British Library

ISBN: 978 1 4728 1261 2

PDF e-book ISBN: 978 1 4728 1262 9

e-Pub ISBN: 978 1 4728 1263 6

Edited by Tony Holmes

Cover Artwork by Mark Postlethwaite

Aircraft Profiles by Jim Laurier

Index by Mark Swift

Originated by PDQ Digital Media Solutions, UK

Osprey Publishing supports the Woodland Trust, the UK's leading woodland conservation charity. Between 2014 and 2018 our donations will be spent on their Centenary Woods project in the UK.

www.ospreypublishing.com

Acknowledgements

Yasuo Izawa would like to thank 343rd Kokutai pilots Susumu Itoh, Ryoji Oh-hara and Tomiya Miyazaki for their assistance in the preparation of this volume. The published works of Yoji Watanabe on the J2M Raiden, the 302nd Kokutai and the Defence of the Homeland have also proven to be invaluable, as has the outstanding book *Genda's Blade* by Henry Sakaida and Koji Takaki. Tony Holmes would like to thank the authors of that book for allowing him to use quotes and photographs in this volume. Thank you also to publishers Robert Forsyth and Eddie Creek at Classic Publications for providing the authors with access to the photographs, and also to Philip Jarrett for the provision of extra images. Finally, thank you to librarian Hiroko Izumiyama of Japan's Military History Department Library for locating relevant material for inclusion in this book.

Front Cover

Whilst escorting the final kamikaze operation against US Navy vessels off Okinawa on 22 June 1945, 31 N1K2-J Shiden-Kais of the 343rd Kokutai clashed with 18 Corsairs from VMF-113 that were flying a combat air patrol in search of suicide aircraft. The fighter formations became embroiled in a fierce engagement northeast of Amami Oshima, 150 miles north of Okinawa and at the very limit of the Shiden-Kai's range. The 343rd subsequently claimed seven Corsairs destroyed for the loss of four pilots, including Sento 407th Hikotai CO Lt Keijiro Hayashi (who had 'made ace' by downing an FG-1D shortly before his own demise). VMF-113 lost two aircraft and had three more badly damaged.

One of the latter was the fighter flown by 2Lt Alton C Frazer, who possibly shot Hayashi down. Frazer was then targeted by Sento 301st Hikotai CO, and 25-victory ace, Lt Naoshi Kanno in his audaciously marked Shiden-Kai. 'I began to notice that my left wing was disintegrating', Frazer later recalled. 'I heard no shots, I heard no gunfire, but I became visually aware that my left wing was coming apart'. Despite being set upon by a second N1K2-J after diving away from Kanno, Frazer managed to nurse his battered Corsair back to le Shima, northwest of Okinawa (*Cover artwork by Mark Postlethwaite*)

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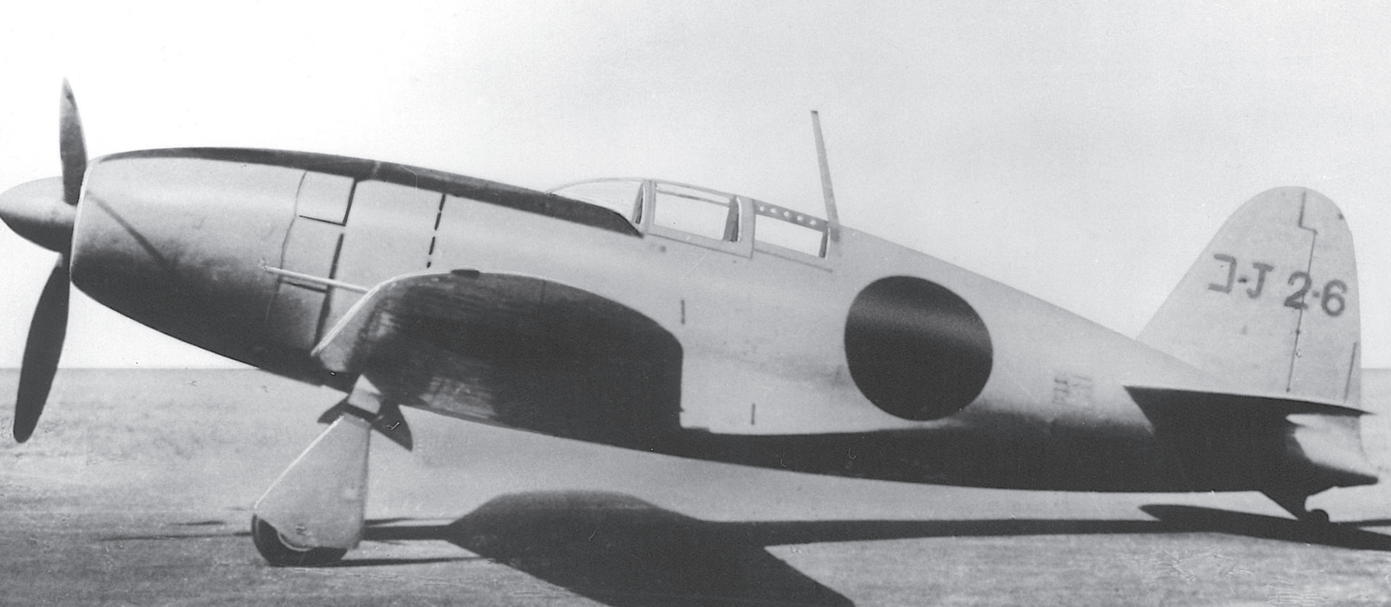
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CHAPTER ONE

THE NEED FOR INTERCEPTORS

The lead aircraft looked to have finished his attack. The target aircraft filled my gunsight. I aimed at the B-29 to the right side of the tail element. The distance shortened to 400 metres, then 300. I gripped the firing lever. The four 20 mm guns spat fire in unison. Tracers flew, trailing red tails. I aimed at the wing root of the B-29. I saw the shells explode. After finishing the attack, I formed up with the lead aircraft. The B-29 emitted white smoke. I did it! The second and fourth aircraft formed up with us. LA Kinzo Kasuya, our fourth man, was my good friend. We finished our second passes and assembled, but I did not see Kasuya again.'

So wrote LA Shokichi Kurumoto of the 343rd Kokutai (Air Corps – roughly equivalent in size to an RAF group) following his attack on a ten-strong formation of B-29s from the USAAF's 314th Bomb Wing high over northern Kyushu on 5 May 1945. Part of Lt Goro Ichimura's division, Kurumoto was at the controls of a Kawanishi N1K2-J Shiden-Kai, the Imperial Japanese Naval Air Force's premier piston-engined fighter. Along with Mitsubishi's less successful J2M Raiden, the Shiden-Kai proved to be one of only a handful of Japanese fighters capable of intercepting the high-flying Superfortresses targeting the home islands in the final year of the war.

A total of eight development prototype J2Ms were built by Mitsubishi, with this example being the sixth completed. These aircraft were initially fitted with an extremely shallow, curved windscreen and canopy in an attempt to reduce drag. However, Mitsubishi test pilot Katsuzo Shima stated after his first flight in the aircraft that the forward view was totally unacceptable and that the curved windscreen badly distorted vision. The sixth prototype was evaluated by the Air Arsenal at Suzuka and then fitted with redesigned cockpit glazing, including a flat windscreen panel, and sent to the 302nd Kokutai for further trials (via Philip Jarrett)

The development of both aircraft had been lengthy due to technical problems and poor project management. However, once the Raiden and the Shiden-Kai began to reach frontline units in larger numbers from early 1945, their superiority over the IJNAF's staple wartime fighter, the A6M Zero-sen, became glaringly obvious – especially to USAAF and US Navy aircrews that encountered them.

When the IJN had launched its daring, and devastating, surprise attack on the US Navy's Pacific Fleet in Pearl Harbor on 7 December 1941, the Zero-sen was the world's best naval fighter by some considerable margin. It retained a position of dominance until late 1943, when a new generation of American naval fighters in the form of the Vought F4U Corsair and F6F Hellcat wrested control of the skies from the IJNAF. With the Zero-sen's replacement delayed by technical problems and the vacillations of senior naval officers, frontline units were forced to fight on with the increasingly obsolescent A6M – Mitsubishi had done its best to keep the aircraft as combat effective as possible with continual improvements to its armament and a series of more powerful engines.

What was needed was an all-new fighter, or fighters, and Mitsubishi had in fact been working on just such a machine for quite some time. Whereas the Zero-sen had been the culmination of a decade of experience accrued by Mitsubishi in building carrier-based fighters for the IJN, its new aircraft would be a land-based machine as requested by the Naval Staff. In a radical departure in IJNAF fighter design thinking, Mitsubishi was instructed to build an aeroplane that stressed speed and rate of climb over manoeuvrability and range.

Jiro Horikoshi and his design team initially discussed the new interceptor with the IJN's Bureau of Aeronautics in October 1938 as part of the 14-Shi armament programme, but Mitsubishi's preoccupation with the A6M saw the aircraft shelved until September of the following year when an official specification was finally drawn up. The performance parameters called for a maximum speed of 373 mph at 19,685 ft, the ability to attain this altitude within 5.5 minutes, endurance of 45 minutes at full power, a takeoff run at overloaded weight in nil-wind conditions not exceeding 985 ft and a landing speed no greater than 81 mph. Armament would consist of two 20 mm cannon and two 7.7 mm machine guns (as fitted in the A6M2), and for the first time armour protection was requested for the pilot in the form of plating behind the seat. In production aircraft, a small piece of 8 mm armour plating was fitted aft of the pilot's head protecting just the base of his neck.

The need for an interceptor that could engage high-flying enemy aircraft was graphically underlined just weeks after the 14-Shi specification was drawn up. On 3 October 1939, Soviet Ilyushin DB-3 long-range bombers being flown by 'volunteer' crews targeted Japanese forces at Hankow airfield during the conflict in China. Attacking from a height of 23,300 ft, nine DB-3s delivered their ordnance with relative impunity as the defending IJNAF Mitsubishi A5M fighters struggled to intercept the high-flying Soviet bombers. Although most of the bombs dropped fell short of the target, one exploded amongst a group of assembled personnel, killing 12. Eleven days later, a repeat raid on Hankow by 20 DB-3s destroyed no fewer than 60 aeroplanes on the ground. Again, the defending A5Ms struggled

to intercept the bombers, although on this occasion the IJNAF pilots claimed two shot down – three DB-3s were damaged. Clearly, a fighter with better high altitude performance and a greater rate of climb was urgently needed.

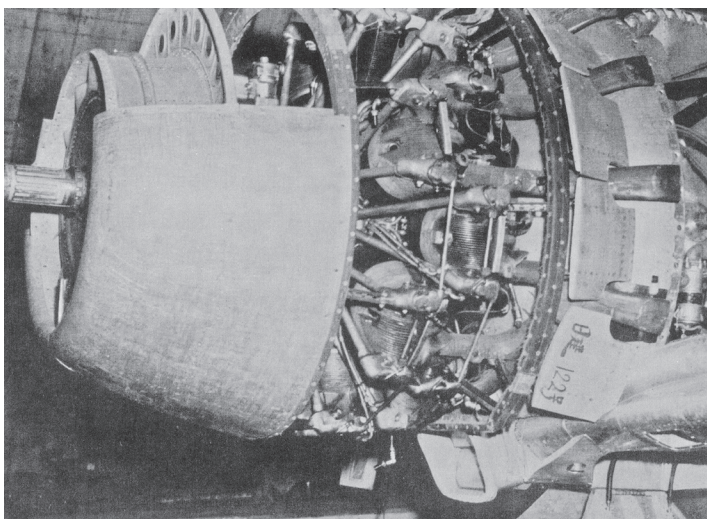
The key to the 14-Shi's performance would be its engine, and Jiro Horikoshi was given a free hand in choosing the powerplant for his new design. Both the Daimler-Benz DB 601A-inspired V12 Aichi Ha-60 Atsuta, rated at 1200 hp, and the 1430 hp Mitsubishi Ha-32 Kasei ('Mars') Model 13 radial engine were evaluated, and Hirokoshi chose

the latter despite its greater weight, larger frontal area and higher fuel consumption. This would ultimately prove to be an unfortunate choice.

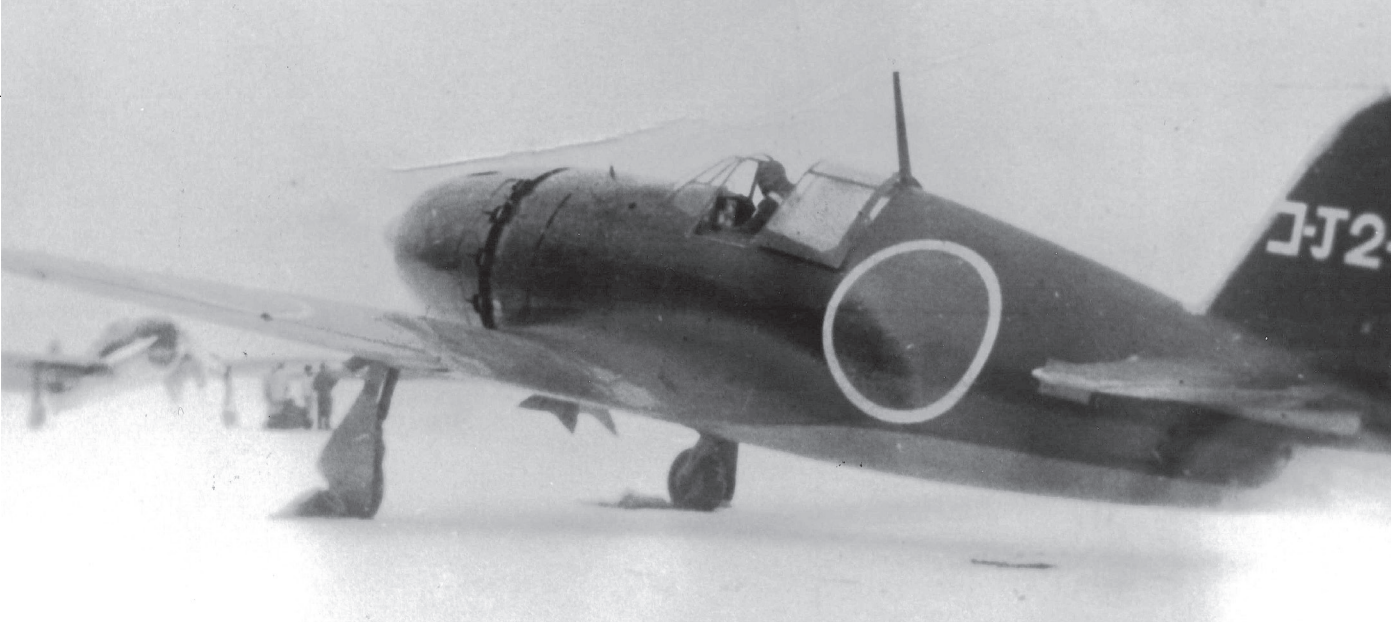
Assisted by Yoshitoshi Sone and Kiro Takahashi, Horikoshi began detail design work in early January 1940 on what by this time bore the Service Aeroplane Development Programme Number M-20. The new fighter was an all-metal cantilever low-wing monoplane, the wing having a single mainspar at 35 per cent chord and smooth flush-riveted stressed skinning. The metal-framed control surfaces on both the wings and tail were fabric-covered, however. The wing was of low aspect ratio and employed a laminar flow aerofoil section. The fuselage was an oval-section semi-monocoque. In order to minimise the drag of the Kasei 14-cylinder engine, an extension shaft was introduced to drive the 10 ft 6 in diameter three-bladed propeller. This allowed the cowlings to be finely tapered, with an engine-driven fan sucking cooling air through a narrow annular intake. In a further attempt to reduce drag, an extremely shallow, curved windscreen and canopy were adopted. The aircraft was also fitted with Fowler combat flaps to increase lift with the minimum of drag when extended, thus improving manoeuvrability. Finally, in an effort to simplify manufacture, forged components were used wherever possible.

Mitsubishi's focus on development and production of the A6M combined with teething troubles suffered by the engine cooling system and the laminar flow aerofoil section to delay the completion of the M-20 prototypes until February 1942. By then the overworked Horikoshi had relinquished the post of Mitsubishi's chief designer to Takahashi. Designated the J2M1 and christened the Raiden (Thunderbolt), the first prototype made its maiden flight from Kasumigaura on 20 March 1942. Mitsubishi test pilot Katsuzo Shima expressed his general satisfaction with the aeroplane in respect to its stability and controllability throughout its entire speed range. However he stated that the forward view was totally unacceptable and that the curved windscreen badly distorted vision. It was also discovered that the undercarriage would not retract at speeds in excess of 100 mph.

By the end of May 1942 Mitsubishi had completed four J2M1 prototypes, and these were transferred without any changes (bar a modification to the



The heart of the Raiden – the Mitsubishi MK4R-A Kasei Model 23a engine, rated at 1870 hp on takeoff. In order to minimise the drag associated with the 14-cylinder air-cooled radial, an extension shaft was introduced to drive a 10 ft 6 in diameter three-bladed propeller. This allowed the cowling to be finely tapered (as can be seen here), with an engine-driven fan sucking cooling air through a narrow annular intake. The Kasei suffered from numerous technical problems throughout the J2M's less than successful service career



Strapped into the cockpit of an early-build J2M2, Lt Mitsugu Kofukuda conducts engine power checks on a snowy flightline at the Air Arsenal's Suzuka facility in early 1943. A Yokosuka D4Y1 Suisui dive-bomber can be seen parked opposite the Raiden

One of the first naval aviators to fly the Raiden was Air Arsenal test pilot Lt Mitsugu Kofukuda, who was a veteran of aerial combat in China. He had examined a mock-up of the aeroplane, then known as the M-20, in December 1940



undercarriage retraction system) to the IJNAF's Air Arsenal at Suzuka for initial service trials. Amongst the pilots to fly the Raiden at this time was Lt Mitsugu Kofukuda, who had seen combat over China. He had previously examined a mock-up of the M-20 on 26 December 1940, commenting to Mitsubishi designers at the time that the pilot's view forward over the fighter's 'bulky fuselage and long nose' was severely restricted. They in turn explained that this arrangement had been adopted to make the fighter as streamlined as possible, thus improving its performance.

Once the Suzuka test flight programme commenced, Kofukuda and his fellow IJNAF test pilots were quickly impressed by the J2M1's rate of climb, roll rate and Fowler flaps – the latter could be lowered to an angle of 16 degrees in combat by pushing a button on the control column, and extended to 50 degrees for landing. However, even with the latter deployed, the aeroplane's approach speed was criticised for being too high. This problem was compounded by the pilot's poor visibility over the nose when coming in to land. By the time the preliminary testing of the prototypes had concluded in late July, Kofukuda, Lts Takumi Hoashi and Motonari Suho of the Air Arsenal (the IJNAF's test and evaluation unit) and Lt Cdr Kiyoto Hanamoto of the Yokosuka Kokutai (an IJNAF fighter test and advanced training unit) agreed that the following areas needed rectification;

- 1) improved vision over the nose of the aircraft through the replacement of the curved canopy.
- 2) replacement of the propeller pitch-change mechanism, which had frequently failed during testing.
- 3) improved engine performance.

In respect to the latter point, flight trials had shown that the J2M1 fitted with the MK4C Kasei Model 13 failed to attain the performance stipulated in the 14-Shi specification issued to Mitsubishi. The aeroplane could not exceed 359 mph at 19,685 ft, and it took 7.8 minutes to reach this altitude. Mitsubishi took two months to introduce changes to the fourth prototype Raiden that it hoped would solve all of these issues,

completing the modified aircraft – re-designated the J2M2 – by early October. This variant had a deeper, more conventional windscreen that embodied optically flat bullet-proof panels of 50 mm plate glass and a four-bladed Sumitomo hydraulically-operated VDM metal propeller. Most importantly, the aeroplane was fitted with the MK4R-A Kasei Model 23a engine, rated at 1870 hp thanks to the addition of fuel and water-methanol injection. The engine had also been modified to incorporate a fan cooling system in place of the Kasei Model 13's complicated and unreliable extension shaft. With the new engine, the length of the nose could be reduced, further improving the pilot's view during landing. Finally, the fighter also had individual exhaust stacks to provide a measure of thrust augmentation.

The IJNAF was so confident that these changes would work that the aircraft was accepted for production as the Navy Interceptor Fighter Model 11 within a few days of 13 October 1942, when the J2M2 made its initial flight, and before any thorough testing had been undertaken. Tooling up for production was begun immediately at Mitsubishi's No 3 (Airframe) Plant at Nagoya. However, it was not long before flight testing soon revealed problems with the Kasei 23a, which was in fact the first Japanese-developed engine to feature water-methanol injection. Excessive smoke trails at maximum rated power were quickly eliminated by adjusting the fuel and water-methanol injection systems, but strong engine vibration proved more difficult to eradicate.

At certain engine and propeller speeds critical and uncontrollable vibration frequency occurred, and many months passed before engineers discovered that the problem could be resolved by increasing the rigidity of the propeller blades and the resilience of engine-mount shock absorbers. Although the vibration issue continued to trouble the Raiden throughout its service life, the fixes devised by Mitsubishi allowed the company to increase production rates. This was just as well, for the combined effect of these teething troubles and the production priority given to the A6M resulted in a painfully slow delivery rate. Indeed, by March 1943, a full six months after the Raiden had been accepted for production, just 14 aircraft (including the three J2M1 prototypes) had been delivered.

With the aircraft now seemingly ready for serious production, three incidents in the space of three months during the summer of 1943 resulted in new delays. The first of these occurred on 16 June when Air Arsenal pilot Lt Takumi Hoashi crashed the second production J2M2 from an altitude of just 65 ft shortly after taking off on a vibration test flight from Oppama – the unit's home from the spring of 1943. The aircraft hit a barn and broke in two, with the pilot still alive and strapped into the cockpit when rescuers reached him. Hoashi was just moments away from being dragged to safety when the right wing tank exploded, incinerating the unfortunate pilot and badly burning several of his would-be rescuers. A subsequent investigation into the crash failed to reveal a definitive cause, and a month later ace CPO Masao Sasakibara of the Air Arsenal managed to land a badly handling Raiden. Again, the cause of the fighter's problems could not be ascertained.

Shortly thereafter, the Air Arsenal was visited by a worried Jiro Horikoshi. Amongst the test pilots he spoke to about these incidents was



Posing, warrior-like, with his A5M during the China War, CPO Kosaku Toyoda was also involved in the evaluation of the J2M1 in late 1943 after several examples were passed on to the Yokosuka Kokutai at Oppama from the co-located Air Arsenal

Lt Yoshio Shiga (who later became executive officer of the 343rd Kokutai), who asked the designer if the J2M's problems with engine and propeller vibration had been created by the elongated propeller shaft fitted to the fighter. 'Absolutely not' was the curt response given by Horikoshi.

Finally, in early September, Mitsubishi test pilot Eisaku Shibayama had just retracted the undercarriage after taking off in the tenth production J2M2 when, simultaneously, the control column was wrenched forward. Fortunately, he had gained some altitude before retracting the gear, and Shibayama had the presence of mind to lower the undercarriage immediately. The Raiden's control then responded normally. After landing, it was found that the tailwheel shock strut had pressed against the elevator torque tube lever during retraction, jamming the controls in the dive position. It was assumed that this had caused the crash of Hoashi's J2M2 and the near demise of Sasakibara's fighter. A modification was promptly made to the elevator control run, and there were no further incidents of this nature.

A handful of J2M1s were passed on to the Yokosuka Kokutai by the Air Arsenal in the autumn of 1943, both units being based at Oppama. There were a number of aces serving with this training unit at this time, including Lt Aya-o Shirane (who was subsequently killed leading the Shiden-equipped unit S701 in the defence of Luzon in November 1944) and WOs Ichiro Higashiyama and Matsuo Hagiri. China War veteran CPO Kosaku Toyoda was also involved in the evaluation of the J2M1 in late 1943, performing a series of dives from 13,000 ft that saw him recover with a 6g pull out to test the strength of the airframe. Upon landing after this thorough workout, he and his groundcrew noticed that one of the horizontal tailplanes was still shaking after Toyoda had cut the engine and climbed out of the fighter. Upon a closer inspection of the aeroplane it was found that the tailplane had failed under the high-g stresses placed on it during the test flight.

The combat veterans of the Yokosuka Kokutai also conducted a series of aerial engagements with A6M3 Zero-sens assigned to the unit. They found that although the J2M1 was easily out-manoeuvred in a horizontal dogfight, it prevailed when flown to its strengths in 'dive and zoom' attacks. Regrettably, despite noting this in reports produced following the evaluation flights, the Yokosuka Kokutai failed to emphasise that this was the best way to use the Raiden in combat against Allied fighters. Indeed, such tactics were only belatedly adopted by the 343rd Kokutai when the unit was equipped with N1K2-J Shiden-Kais in 1945. Had J2M pilots been trained in 'dive and zoom' tactics the aeroplane could possibly have held its own in aerial combat against American fighter types, rather than being restricted to intercepting bombers only.

Yokosuka Kokutai test pilots also explored the Raiden's suitability as a bomber interceptor – its primary mission – by engaging Mitsubishi G4M Rikkos approaching at both high and low level. Ace CPO Ryoji Oh-hara, a veteran of combat over the Solomons, Rabaul and New Guinea, was involved in these flights. He experienced the technical problems that plagued the J2M during this period when engaging Rikkos from head-on and below. Following fellow veteran Ens Torakichi Tanaka in a mock attack, Oh-hara was alarmed to see the propeller of his Raiden come to a virtual stop, forcing him to dive away and immediately land. The aircraft appeared to be perfectly

serviceable when examined on the ground, so Oh-hara was ordered to repeat his attack profile in the same J2M1 the following day. Sure enough, the propeller stopped when he pulled the nose of the fighter rapidly up in order to attack the underside of the Rikko. This time the engine stalled too, and after reporting this over the radio, Oh-hara skilfully deadstick-landed the fighter from an altitude of 15,000 ft. On this occasion it was found that the propeller pitch governor had failed.

Oh-hara carried out a second deadstick landing a short while later when the throttle of the fighter he was testing in a high speed climb to 20,000 ft refused to move. Cutting the engine at a height of 13,300 ft whilst overhead the naval airfield of Atsugi, Oh-hara managed to successfully land the Raiden there. Groundcrew from the resident 302nd Kokutai fixed the throttle and Oh-hara duly flew the aeroplane back to Oppama.

Despite these teething problems, in December 1943 the IJNAF finally accepted its first batch of J2M2s. These aircraft were flown to Toyohashi, southeast of Nagoya, for service with the 381st Kokutai. By then, the improved J2M3 had commenced flight testing, this variant featuring a new and enlarged oil cooler with an external intake and, most importantly, a more potent armament of four wing-mounted 20 mm Type 99 cannon. The two shorter-barrel Model 1 weapons were fitted alongside the original Model 2 long-barrel cannon that had been seen in previous Raiden variants. Although the Model 1s had a lower muzzle velocity and rate of fire than the long-barrel weapons, they still packed a far greater punch than the fuselage-mounted 7.7 mm machine guns, which were discarded.

Initially manufactured alongside the J2M2 Model 11, the J2M3 Model 21 soon supplanted it in production at Mitsubishi's Nagoya and Suzuka factories. The first production examples were completed at the beginning of February 1944, while the last (and 155th) production J2M2 left the Nagoya line in early May. Despite the improvements introduced to the Raiden, service pilots still complained about the fighter's poor lateral and rear visibility, and its performance. With the J2M2, this had almost reached the specification requirements issued by the IJNAF when it contracted Mitsubishi to build the 14-Shi almost five years earlier. However, speed and rate of climb once again fell below par when the heavier, but better armed, J2M3 was built.

In June 1944 the IJN's Bureau of Aeronautics, disenchanted with the Raiden because of its protracted teething troubles and low mechanical reliability, decided to adopt the faster NIK1J Shiden ('Violet Lightning') as its main interceptor. Construction of the J2M would continue, but at a reduced tempo only until the availability of the Mitsubishi A7M Reppu ('Hurricane') permitted its complete production phase out. However, within weeks of this decision being taken the war situation for Japan had deteriorated to such an extent that the Raiden, now seen as one of the only Japanese fighters capable of intercepting B-29 bombers, had its production reinstated. Furthermore, the Koza Kaigun Kokusho (Koza Naval Air Arsenal) was ordered to commence building Raidens too.

In order to improve the fighter's performance at high altitude, Mitsubishi began experimenting with the turbo-supercharged MK4R-C Kasei Model 23c engine. Mounted in the fuselage behind the cockpit and fitted with a large intake on the port side of the cowl, the mechanically-driven



Sixteen-victory ace CPO Ryoji Oh-hara, a veteran of combat in the Zero-sen over the Solomons, Rabaul and New Guinea, was involved in test flights generated by the Yokosuka Kokutai to ascertain the Raiden's suitability as a bomber interceptor – its primary mission – by engaging Mitsubishi G4M Rikkos approaching at both high and low level. He experienced the technical problems that plagued the J2M during this period, being forced to make two deadstick landings in the aeroplane in quick succession



Hardworking groundcrew from the Yokosuka Kokutai briefly down tools for the camera while their compatriots wrestle with a problem afflicting the Kasei engine fitted to the J2M2 parked behind them at Oppama. With the Raiden afflicted by myriad technical problems, scenes like this were repeated on a daily basis at airfields that were home to J2M-equipped units

aircraft achieved speeds of 375 mph at 26,250 ft and was immediately ordered into production at the Koza Kaigun Kokusho. Just 34 had been delivered by war's end due to delays in the delivery of the Kasei 26a engine.

The production of Raiden fighters of all types (including prototypes and experimental models) totalled just 476 machines – the IJNAF had hoped to have 3700 examples in service by June 1945. The aircraft that made it to frontline units served primarily with the 301st, 302nd, 332nd, 352nd and 381st Kokutais, as detailed later in this volume.

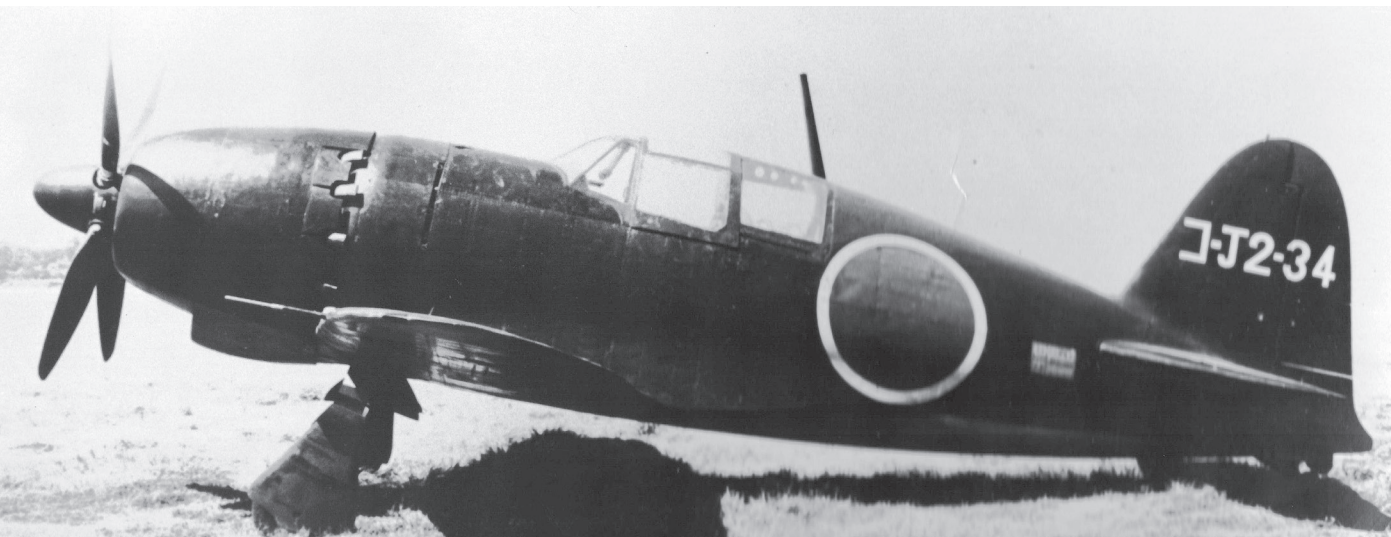
RAIDEN FROM THE COCKPIT

The prototype of the J2M3 Raiden 21 was issued to the Air Arsenal in October 1943, this variant featuring an enlarged oil cooler and external intake beneath the engine. The J2M3 was the most-produced of all Raiden variants, with 260 examples being built. This particular aeroplane subsequently served with the Chushi Kokutai in China

A handful of serviceable J2M3s were captured by US forces near Manila when the Japanese were defeated in the Philippines in early 1945. Several were quickly restored to flying condition and tested by Allied field grade evaluation pilots, one of whom filed the following report on the aeroplane;

‘Taxiing and ground handling in general are excellent, visibility from the cockpit on the ground being much better than that offered by the Nakajima Hayate due to the wide cockpit canopy and more forward

turbo-supercharger allowed the engine's permitted rated power of 1420 hp to be maintained up to an altitude of 30,180 ft. This in turn meant that the J2M4 Model 34 in which the engine was installed could attain a speed of 363 mph. Unfortunately, for the IJNAF, the turbo-supercharger system was highly complex and prone to failure, forcing its abandonment after just two Model 34s had been built. The J2M5 Model 33 that preceded the J2M4 proved to be marginally more successful, however, this variant featuring a MK4U-4 Kasei Model 26a engine with a mechanically-driven three-stage supercharger and an enlarged intake manifold. This



position of the seat. Good taxiing brakes are fitted on a British-type rudder bar, but the rudder is not very effective during taxiing and no tailwheel lock is fitted. Takeoff is normal, with little tendency to swing, but the tail does not come up readily owing to the small elevators. When the tail is raised, forward vision is good. Takeoff run is short and the aircraft leaves the ground readily at 100 mph. There is practically no change in trim with gear retraction. Climb angle is steep and the rate of climb rapid, and the cooling of engine and oil appears to be excellent. Handling and control are good at all speeds from the stall up to 325 mph, although the ailerons are heavy at normal cruise speeds, and become exceptionally so above 325 mph. The elevators are on the light side at all speeds up to 325 mph. The rudder is satisfactory at all speeds.

'Rudder and elevator trim tabs are controlled by parallel wheels in longitudinal plane on the port side of the cockpit, and the rudder control tab is ineffective, but little change in rudder trim is required. The elevator tab is adequate and very effective, but it works in reverse of Allied procedure (i.e. rolling the wheel backwards makes the aircraft nose heavy). The aircraft is dynamically and statically stable longitudinally and directionally, and neutrally stable laterally. In short, stability is excellent. The uneven use of fuel from either port or starboard wing tanks quickly results in the aircraft becoming markedly wing heavy.

'The aircraft was stalled clean and dirty, and stalling characteristics are excellent except for a lack of stall warning. The nose drops gently, either straight ahead or on either wing, and recovery is very rapid, with little loss of altitude. The oil and engine cowl flaps have no noticeable effect on stalling speed, and there is no tendency to spin. Rolls, Immelmans and turns are executed with ease at normal speeds, although ailerons are heavy at all operating speeds and the aircraft cannot be rolled as rapidly as a P-51. Manoeuvre flaps of Fowler type are fitted, and are controlled by a safety switch and a trigger on the stick. These are extended only when the trigger is depressed and retract immediately the trigger is released, and their operation is superior to any used on our aircraft. The elevators are too light at normal and high speeds, and it is felt that the aircraft may be easily damaged by rough handling of the elevators.

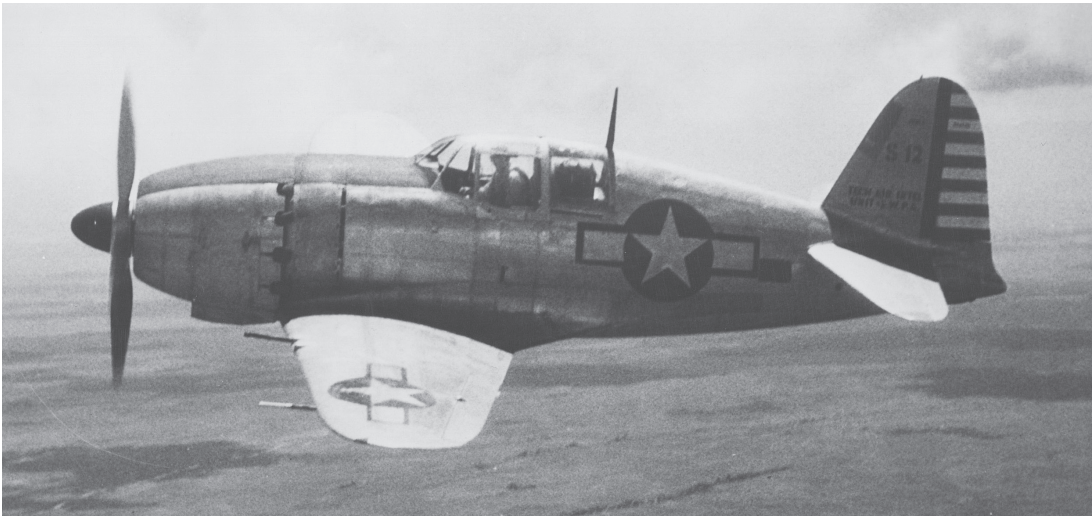
'The engine was rough at cruising rpm in automatic mixture setting. This roughness was reduced as soon as the mixture was leaned out, but this caused the exhaust temperature to go above the limits. Vibration is not excessive, but the canopy fitted on this particular aircraft vibrates and makes considerable noise. For



This J2M3 was assigned to the Yatabe Kokutai, which was one of at least three units that trained pilots to fly IJNAF fighters such as the Zero-sen, Raiden, Shiden and Shiden-Kai. Very few J2Ms were supplied to training units due to their paucity in number. The Raiden's engine-driven cooling fan can be clearly seen from this angle, as can its 20 mm Type 99 cannon. The J2M3 boasted four such weapons, two shorter-barrel Model 1 cannon being fitted outboard of the original Model 2 long-barrel guns that had been seen in previous Raiden variants

This J2M3 was captured on Dewey Boulevard, in downtown Manila, which was used by the IJNAF as an emergency airstrip during the final weeks of the ill-fated defence of the Philippines. Acquired by the Technical Air Intelligence Unit (TAIU), which stripped it of its camouflage and applied US markings, the Raiden was flown twice from Clark Field (via Philip Jarrett)



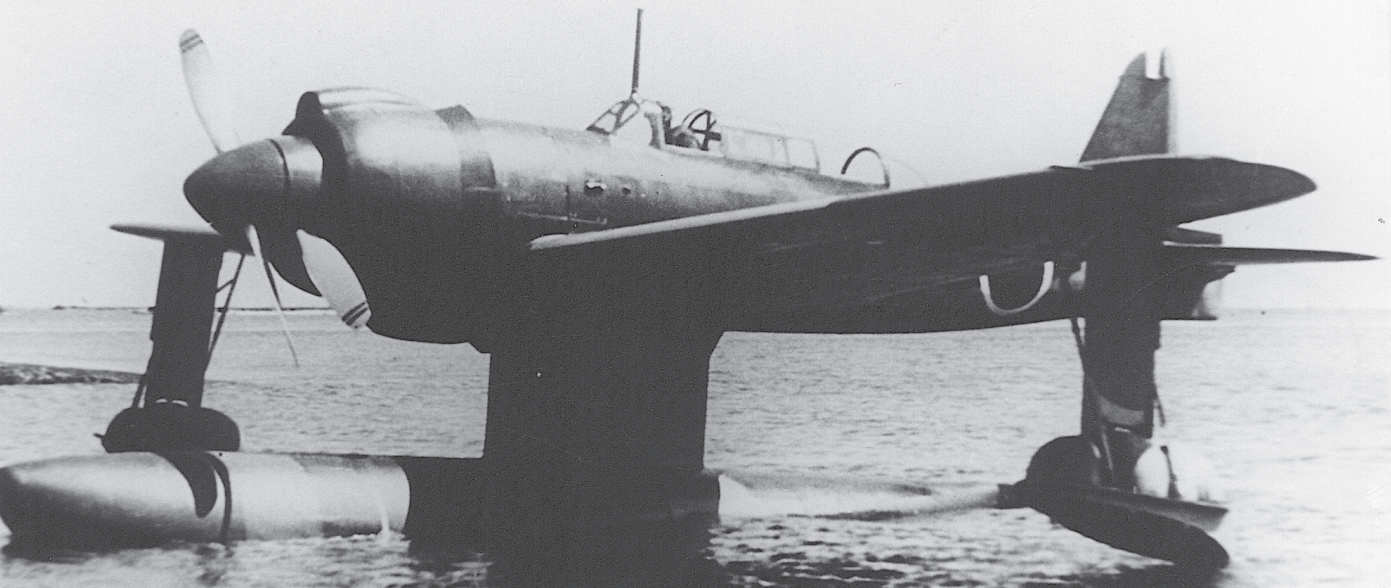


The TAIU managed just two flights in the Raiden (totalling 3 hours 20 minutes) before the engine seized when the main oil delivery hose failed. The pilot of the fighter performed a successful deadstick landing – almost certainly the last of many in the J2M (via Philip Jarrett)

a normal-sized pilot the aircraft is comfortable. There is ample headroom and body room, and the cockpit enclosure is wide, permitting freedom of movement of the head, and this improves vision. The ventilation system, which comprises forward and aft ventilators, is superior to any fitted to our fighters. The rigging of the stick and rudder is satisfactory, and all controls are readily accessible. The cockpit layout is, in general, very satisfactory, and the engine and flight instruments are well grouped, although the airspeed indicator is too far from the rev counter and manifold pressure gauge (this is especially noticeable during the takeoff run). Intermittent noise is the only real objection to comfort. Ground observers state that the noise emitted by the cooling fan is very noticeable, but that it is not heard in the cockpit. Vision in climb, level flight and for landing is good, although rather poor for takeoff until the tail comes up. Aft vision is good if the rear transparency panels are kept clean, but the metal framing of the windscreen tends to obstruct forward vision.

‘The powerplant is generally satisfactory. It is very easy to start, hot or cold, but, as already mentioned, runs roughly at cruising revs. Airscrew operation is satisfactory at normal revs but hunts at higher revs at about 10,000 ft, although it should be noted that airscrew control on this particular aircraft had been changed from hydraulic to electric, so is non-standard. Oil and engine cooling are exceptionally good, and gave the impression that they would over-cool in cold weather. It was noted that there is considerable vibration for a short period when the engine is put into high blower at 12,000 ft pressure altitude.

‘In conclusion, it may be said that the favourable features of this fighter are: (1) Good stability; (2) Good stalling characteristics; (3) Comfort; (4) Good takeoff and landing qualities; (5) Good performance; (6) Manoeuvre flaps. Its poor features are: (1) Brakes and rudder brake action; (2) Heavy ailerons and lack of manoeuvrability at high speed; (3) Low mechanical reliability; (4) Short range.’



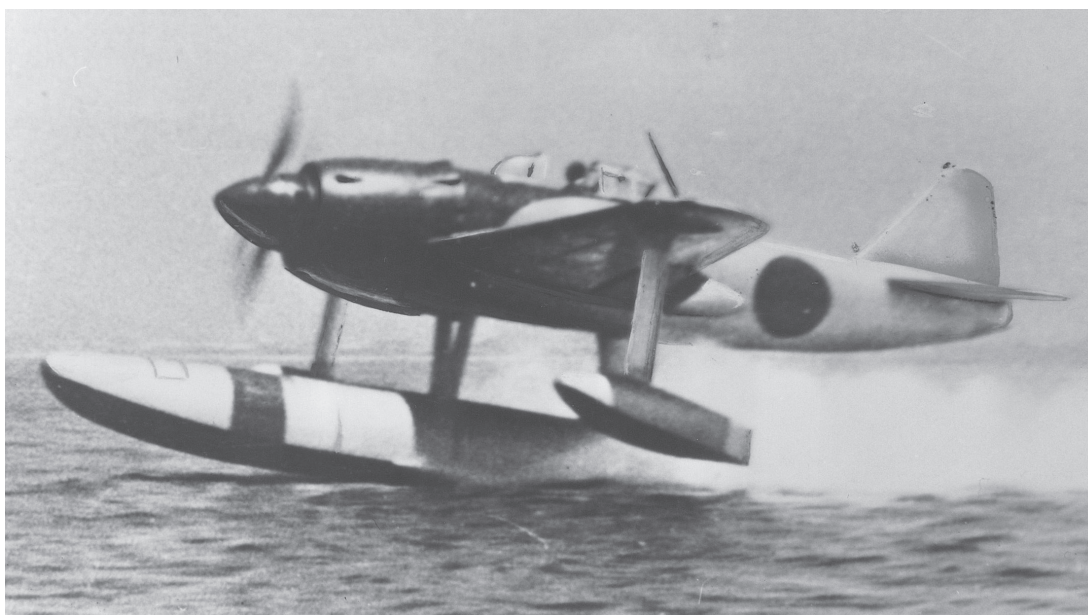
CHAPTER TWO

KAWANISHI FIGHTERS

As previously noted, in June 1944 the IJNAF decided that the myriad problems afflicting the Raiden were never going to be solved, thus allowing the fighter to fulfil the 14-Shi specification issued to Mitsubishi pre-war. By then a new interceptor was on the cusp of entering frontline service that was both faster and more reliable than the J2M. The Kawanishi N1K2-J Shiden-Kai would ultimately prove more effective as an interceptor, although as with the Raiden it suffered from poor mechanical reliability and paucity in numbers.

Unlike Mitsubishi, Nakajima and Kawasaki, Kawanishi had very little experience in building fighter aircraft, the company specialising in large, long-range flying boats like the H6K and H8K. In an ironic twist of fate, Kawanishi's affinity with water-borne aircraft eventually led it to produce one of the finest land-based piston-engined fighters of the war. Both the Shiden and its lineal descendant, the Shiden-Kai ('Kai' meaning 'improved'), owed their existence to the N1K1 Kyofu ('Mighty Wind') floatplane. The development of the latter was prompted by an IJNAF request in 1940 for a floatplane fighter to support Japanese amphibious landing forces in areas where there was no adjacent airfield for land-based fighters. While Nakajima undertook the development of an interim aircraft (the A6M2-N, derived from the Zero-sen), Kawanishi was instructed to design an all-new aeroplane. The 15-Shi specification covering this aircraft was issued by the IJN in September 1940, and planning commenced immediately at Kawanishi.

The Kyofu floatplane fighter could trace its lineage to the advanced, but ultimately unsuccessful, E15K Shiun reconnaissance seaplane. Kawanishi employed some of the technology seen in this aircraft – laminar-flow wings, contra-rotating two-bladed propellers to negate torque on takeoff and a Kasei 14 radial engine – in the new fighter. Only six prototypes and Service trials Shiuns and nine production-standard E15Ks were built between 1941 and 1944 (*via Philip Jarrett*)

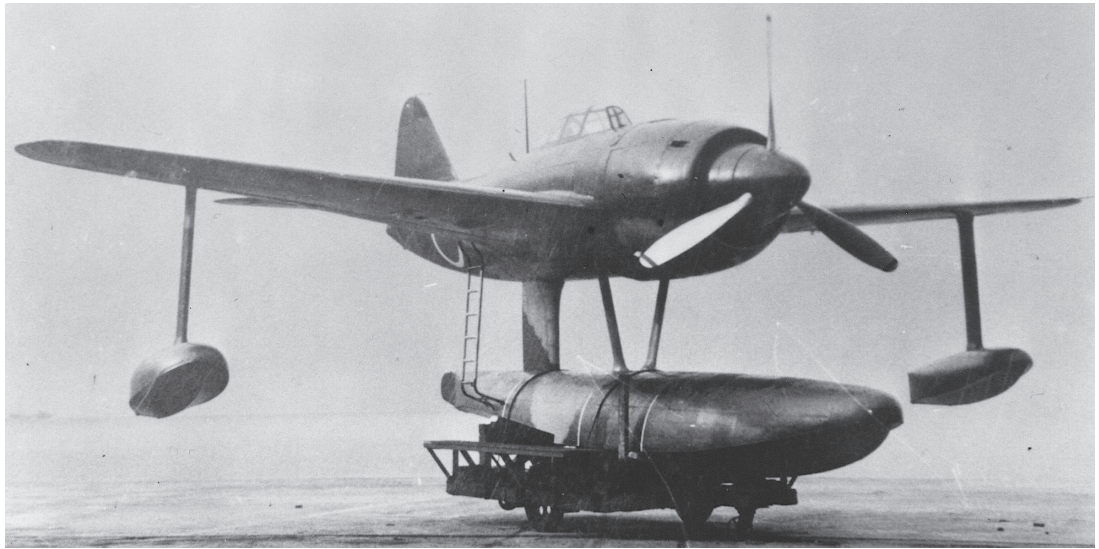


A rare photograph of the N1K1 prototype (which, at the time, was designated the K-20 by the Service Aeroplane Development Programme) 'on the step' prior to taking off during early flight trials in the summer of 1942. Teething troubles with the gearbox for the contra-rotating propellers (a problem that had previously blighted the Shiun programme) soon saw the MK4D Kasei Model 14 engine replaced with a MK4C Kasei Model 13 driving a conventional three-bladed propeller via an extension shaft (*via Philip Jarrett*)

The company had been working on the ultimately unsuccessful E15K Shiun ('Violet Cloud') reconnaissance seaplane for over a year by then, and the 15-Shi would employ some of the advanced technology seen in this aircraft – laminar-flow wings, contra-rotating two-bladed propellers to negate torque on takeoff and a Kasei 14 radial engine. Designated the K-20 under the Service Aeroplane Development Programme system and the N1K1 Kyofu by Kawanishi, the comparatively heavy mid-wing monoplane of all metal construction had a single central float that was attached to the fuselage by a V-strut forward and an I-strut at the rear. Retractable stabilising floats near the wingtips (similar to those installed in the Shiun) were initially proposed, but these were replaced by fixed cantilever floats when the former encountered difficulties in the E15K's early flight trials.

Following its completion at Kawanishi's Naruo plant, the first of eight prototype/Service trials N1K1s completed its maiden flight on 6 May 1942. Teething troubles with the gearbox for the contra-rotating propellers (a problem that had previously blighted the Shiun programme) quickly saw the MK4D Kasei Model 14 engine replaced with a MK4C Kasei Model 13 driving a conventional three-bladed propeller via an extension shaft. The Kasei Model 13-powered second prototype was delivered shortly thereafter, and although the new engine/propeller combination was more reliable, the powerful on-water torque generated on takeoff meant that only the most skilled of pilots could fly the Kyofu. Nevertheless, Service trials aircraft were handed over to the IJNAF from August 1942, the fighter being rated as extremely pleasant to fly. Pilots were particularly impressed by the Kyofu's outstanding manoeuvrability thanks to its combat flaps. Like the A6M2 that had achieved air superiority for the IJNAF in the Pacific in 1942, the N1K1 was armed with two wing-mounted 20 mm cannon and two fuselage-mounted 7.7 mm machine guns.

The Kyofu was ordered into quantity production in the autumn of 1942 and deliveries began in the spring of 1943. However, production was



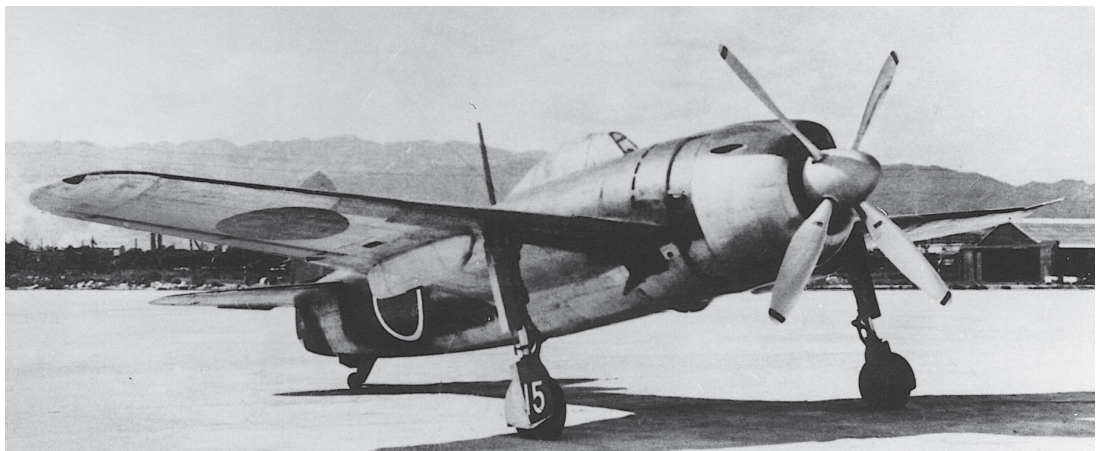
slow in gaining momentum, and by December 1943, when the delivery rate had reached 15 aircraft per month, the IJNAF took the decision to cease manufacturing the N1K1 – the last of just 97 Kyofus, including eight prototypes and Service trials aircraft, was delivered in March 1944. The halting of production in favour of the land-based N1K1-J Shiden (the land-based development of the aeroplane) reflected the fact that Japan no longer had the upper hand in the Pacific War, hence the IJNAF had no need for a fighter designed to support offensive operations. A land-based interceptor capable of defending the Home Islands from attack was now the priority, and Kawanishi believed it had just the fighter for the job.

A total of eight prototype and Service trials N1K1s were built by Kawanishi, with all bar the first machine being powered by a Kasei Model 13 engine driving a three-bladed propeller. Although the new engine/propeller combination was more reliable, the powerful on-water torque generated on takeoff meant that only the most skilled of pilots could fly the Kyofu (*via Philip Jarrett*)

‘VIOLET LIGHTNING’

In December 1941, while detailed design work was still being carried out on the N1K1, the Kawanishi engineering team briefed their management on a land-based derivative of the Kyofu. The projected performance of the aeroplane was enough to convince Kawanishi to develop the machine

Designated the X-1 (Experimental Interceptor No 1) by Kawanishi and, eventually, the N1K1-J Shiden by the IJNAF, the prototype – with Air Arsenal pilot Lt Takumi Hoashi at the controls – made its first flight from Itami airport on 31 December 1942. A total of nine Shiden prototypes were built (*via Philip Jarrett*)



privately. By the end of the year the company had submitted a proposal for the fighter to the IJNAF HQ, and its Technical Director for Aircraft, Vice Admiral Rikizo Tada, was impressed enough by what he saw to give the aeroplane his blessing. Although no official specifications were subsequently issued, Kawanishi believed that if it built a fighter that was better than those either in service or already under development, the IJNAF would buy it. The company appointed Shizuo Kikuhara to head the engineering team, while the IJNAF assigned Engineering Cdr Junjiro Suzuki to offer guidance.

Initially, with the exception of the replacement of the ventral float and outrigger floats by a fully retractable, wheeled undercarriage, few modifications to the Kyofu were planned. However, it was soon decided to replace the 14-cylinder MK4D Kasei 14 engine with the new 18-cylinder Nakajima NK9B Homare 11 radial, which was expected to produce more than 1800 hp – the Homare was based on Nakajima's successful 14-cylinder NK1C Sakae 12, fitted in the A6M2. To take full advantage of all of this power, a VDM four-bladed propeller with a diameter of almost 11 ft was selected. The large diameter of the propeller, combined with the location of the wings at mid-fuselage, meant the adoption of lengthy and complex undercarriage legs that contracted as they retracted into the wing wells – for landings, the process was reversed. Modifications were also made to the combat flap system, which was changed from manual control in the Kyofu to automatic extension/retraction in the new land-based fighter.

Despite the landing gear presenting problems to the design team,

construction of the prototype progressed rapidly at the Naruo plant. Designated the X-1 (Experimental Interceptor No 1) by Kawanishi and, eventually, the N1K1-J Shiden by the IJNAF, the prototype – with Air Arsenal pilot Lt Takumi Hoashi at the controls – made its first flight from Itami airport on 31 December 1942. As with the Raiden, the Shiden was afflicted by numerous problems during its flight trials programme. The Homare engine failed to produce the power it was hoped for – its top speed was initially 357 mph, whereas its calculated maximum speed had been estimated at 403 mph – primarily because of poor fuel quality and unreliable carburettors. Hoashi also complained about poor visibility from the cockpit during taxiing due to the length of the undercarriage legs, which quickly proved to be unsuitable for unpaved runways. Finally, the fighter also suffered from excessive propeller torque on takeoff.

Air Arsenal pilot Lt Takumi Hoashi (seen here with a Mitsubishi A5M fighter) was killed just six months after taking the Shiden aloft for the first time. On 16 June 1943, the second production J2M2 that he was flying crashed shortly after takeoff from Oppama. The fighter hit a barn and broke in two, and Hoashi was still alive when rescuers reached him. He was just moments away from being dragged to safety when the Raiden's right wing tank exploded, incinerating the unfortunate pilot and badly burning several of his would-be rescuers



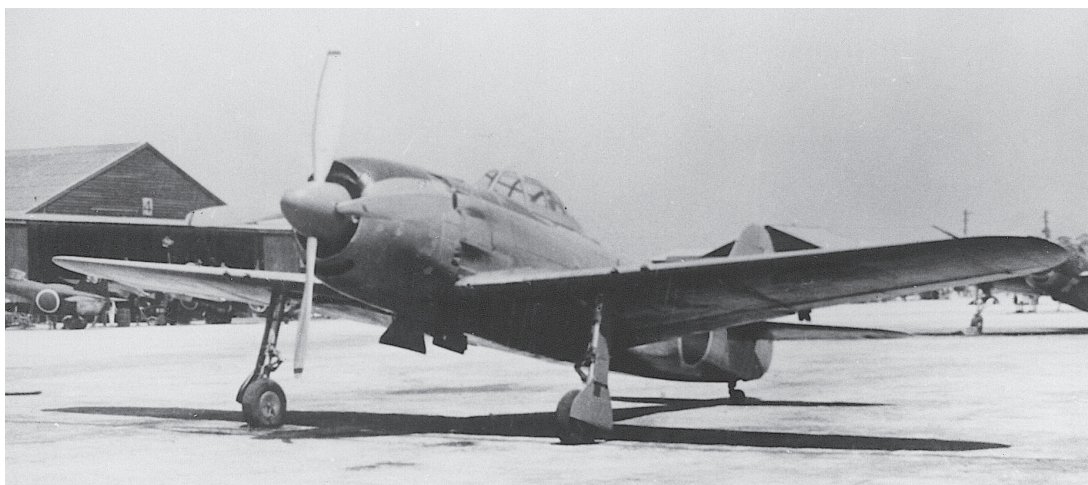
However, in the air, the fighter was a revelation thanks to the automatic combat flap system inherited from the Kyofu. A Japanese innovation, it was unique to Kawanishi's late-war fighters. When flying a Zero-sen in aerial combat, the pilot had to manually engage the fighter's flaps. If he banked his fighter sharply to the left to instigate a turn without having correctly engaged the flaps, the aircraft would instead bank violently to the right. This was because the right wing had stalled due to the greatly increased angle of incidence associated with the turn. With the combat flaps, the latter lowered automatically at a steady rate when the fighter started to manoeuvre, enabling the pilot to make a sharp turn without having to exert a heavy force on the control column, endure high g-force or cause the N1K1 to stall. On 5 June 1943, a mock dogfight between the original Shiden prototype, which lacked the flaps, and a newly built aircraft that had them installed saw the latter fighter dominate the engagement.

Nevertheless, IJNAF personnel (both pilots and engineers) remained unhappy with the Shiden, principally because the fighter had been developed privately by Kawanishi without their direct input. Yet even with the reduced performance of its engine, the N1K1 was faster than the A6M5 that currently equipped the frontline and the J2M2 that was on the cusp of operational service. It also had a greater range and was more manoeuvrable than the Raiden. With Corsairs and Hellcats now appearing in the Pacific theatre, the IJNAF knew that it had to stick with the Shiden. The aeroplane was duly improved by Kawanishi with the help of Service engineers and technicians, the fighter being fitted with the more reliable 1990 hp NK9H Homare 21 enclosed in a modified cowl that featured an additional lower lip scoop, individual exhaust stacks and an external oil cooler on the port side of the cowl. The Shiden's armament was also improved, with two additional 20 mm Type 99 Model 2 cannon being installed in the wings outboard of the gondola-housed 20 mm weapons originally fitted to the prototype N1K1 (both variants retained the fuselage-mounted 7.7 mm Type 97 machine guns).

By the end of 1943, 70 N1K1-Js had been built by Kawanishi's Naruo plant and the first example had rolled off the line at Himeji. Ultimately, 539 Shidens (prototypes and production aircraft) would be completed at

This view of one of the prototype N1K1-Js clearly shows just how similar the Shiden and Kyofu were, particularly in respect to the generously proportioned fuselage and mid-mounted wings (via Philip Jarrett)





The prototype N1K2-J completed its first flight from the newly constructed Naruo airfield on 1 January 1944, with Kawanishi test pilot Munekichi Okayasu at the controls. About a week later Air Arsenal pilot Lt Yoshio Shiga (who would subsequently serve with the Shiden-Kai-equipped 343rd Kokutai) took the aeroplane aloft for the first time. The aeroplane, painted orange/yellow overall as per IJNAF regulations, is seen here on the Naruo flightline surrounded by brand new Shidens (via Philip Jarrett)

Naruo and 468 at Himeji. Despite suffering ongoing engine unreliability and undercarriage problems stemming from poor machine tooling and inferior-quality materials, fighters began to reach the frontline in early 1944.

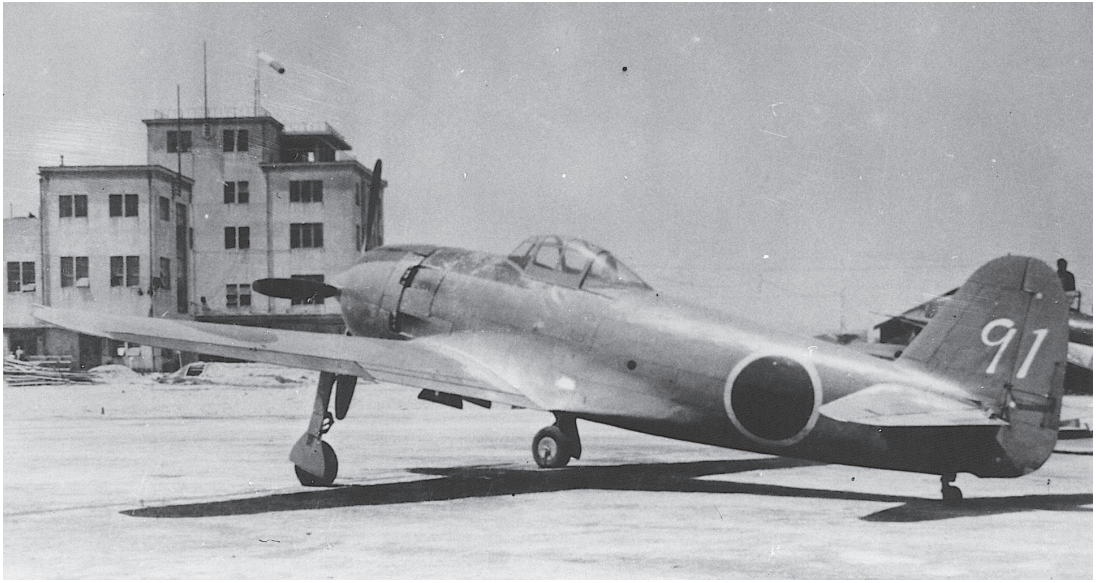
SHIDEN-KAI

Just four days after the first flight of the N1K1-J in X-1 prototype form, Kawanishi's design team commenced work on an advanced version of the aircraft. The Shiden was subsequently seen as a stopgap fighter pending availability of the new version, designated the N1K2-J and christened the Shiden-Kai ('Violet Lightning Improved'). Keen to eliminate the need for the long, complex and troublesome undercarriage of the Shiden, and anxious to simplify construction and maintenance, Kawanishi moved the wings to the lower fuselage, adopted conventional landing gear and entirely redesigned the fuselage and tail surfaces. The end result of these changes was a virtually new aircraft that retained only the wings and the cannon armament of the N1K1-J (all four 20 mm weapons were now installed within the wings, however).

The prototype N1K2-J completed its first flight from the newly constructed Naruo airfield on 1 January 1944, with Kawanishi test pilot Munekichi Okayasu at the controls. About a week later Air Arsenal pilot Lt Yoshio Shiga took the aeroplane aloft for the first time;

'It was a test flight under limited conditions. There were still problems with the engine and propeller. At an altitude of 3000 m there was no problem with stability in either direction, even when the landing gear and flaps were down. Stall came abruptly – this was different from the Zero-sen fighter. Visibility was okay. There was no problem with the tailplanes or rudder. The Shiden-Kai was totally different to fly than the Shiden. I signalled to observers on the ground that the aircraft was fine to fly by carrying out a shallow dive towards the runway and then making a short-turn landing after pulling up at low altitude.'

Although the Shiden-Kai was a handful near the stall (pilots had to be sensitive with the flight controls, as being rough with the aircraft could lead to an autorotation spin that was hard to recover from), it was an



excellent heavy interceptor that could exceed the light Zero-sen fighter. It might not have been sophisticated, but the aeroplane's four 20 mm cannon were effective.

The performance of the Homare engine continued to be lower than expected, however. Fuel quality was down to 85 octane because it was mixed with an oil extracted from pine tree roots – this proved to be very volatile. Nevertheless, even under these conditions, pilots in the frontline would claim that the Shiden-Kai's performance was good up to around 30,000 ft.

Manufacturer's trials of the N1K2-J were completed in just 15 weeks, allowing the fighter to be handed over to the IJNAF in April 1944. The latter demonstrated its confidence in the Shiden-Kai by authorising quantity production before the completion of Service trials. By June 1944 seven additional prototypes had been built, and production aircraft, designated Navy Interceptor Fighter Shiden-Kai Model 21, began rolling off the assembly lines at Naruo. Although seven other plants were also ordered to build N1K2-Js, production fell considerably behind schedule as B-29 raids on key sites led to a shortage of engines and equipment. Ultimately, by VJ Day, just 351 N1K2-Js had been completed by the Naruo plant and 42 by Himeji – it had been hoped to have 2000 in service by the summer of 1945.

Wearing the production number '91' in white on its tail, the prototype Shiden-Kai sits on the Naruo ramp between test flights. Production aircraft differed very little from this machine, with only the cowling and exhaust stubs being altered. The first 100 N1K2-Js also had the larger tail as seen here, with all subsequent examples having a vertical stabiliser that was 13 per cent smaller in area (*via Philip Jarrett*)



CHAPTER THREE

N1K1 KYOFU AND J2M RAIDEN IN COMBAT

This J2M3 was one of a handful of unserviceable Raidens left behind in Manila by the 381st Kokutai following its hasty departure from the Philippines in December 1944. The unit's J2Ms had spent just a month in-theatre, being tasked with intercepting USAAF bombers targeting Manila. Indeed, this machine was found along with assorted other IJNAF types abandoned amongst the trees on Dewey Boulevard, in downtown Manila. The 381st had used the road as an emergency airstrip during the final weeks of the ill-fated defence of the Philippines (via Philip Jarrett)

Although built in the fewest numbers, the Kyofu was the first of the late war interceptors to be blooded in aerial combat. Ironically, however, the IJNAF's stopgap A6M2-N (of which 327 were built between December 1941 and September 1943) floatplane fighter saw considerably more action than the definitive N1K1 as the tide of the war in the Pacific turned against the Japanese. Initially issued to two fighter buntai (flights) within the flying boat-equipped Yokohama and Toko Kokutai from July 1942, the A6M2-N fought in the Solomons (Yokohama Kokutai) and the Aleutians (Toko Kokutai, which was later re-designated the 5th Kokutai and, finally, the 452nd Kokutai). The Kamikawa Maru and 14th Kokutai also used the A6M2-N in the Solomons, as did the 934th Kokutai in western New Guinea and the 902nd Kokutai in the defence of Truk Lagoon and Chichi Jima.

More than 50 victories were credited to A6M2-N units, although these successes came at a high price as the floatplane fighter, although quite fast and agile, was no match for its land-based Allied opponents. The 934th Kokutai was the high-scoring floatplane fighter unit, being charged with the defence of Maikoor, on one of the Aru Islands in western New Guinea,

nearby Manokwari and Ambon Island, in the Maluku archipelago. In late 1943 this unit sent its pilots to Singapore to collect a handful of Kyofus that had been shipped there for the 934th from Japan. Flown back to Ambon via Java, the N1K1 was credited with its first victory on 16 January 1944 when a B-24 Liberator was intercepted over the island by PO1c Kiyomi Katsuki.

By then a veteran naval aviator, Katsuki had claimed three victories whilst flying Mitsubishi F1M reconnaissance floatplanes from the seaplane tender *Chitose* during the Japanese landings in the Dutch East Indies and the Guadalcanal campaign – his third success came after he rammed a B-17 Flying Fortress on 4 October 1942. Not only did Katsuki and his observer survive the collision, they went up again several hours later and claimed another victory and a probable. Following conversion to the A6M2-N, he transferred to the 452nd Kokutai in the Kuriles (Aleutian Islands) and claimed a B-24 shot down on 12 September 1943. Katsuki and the few surviving members of the 452nd left the area when their seaplane base finally froze over, returning to Japan onboard the submarine *I-36*.

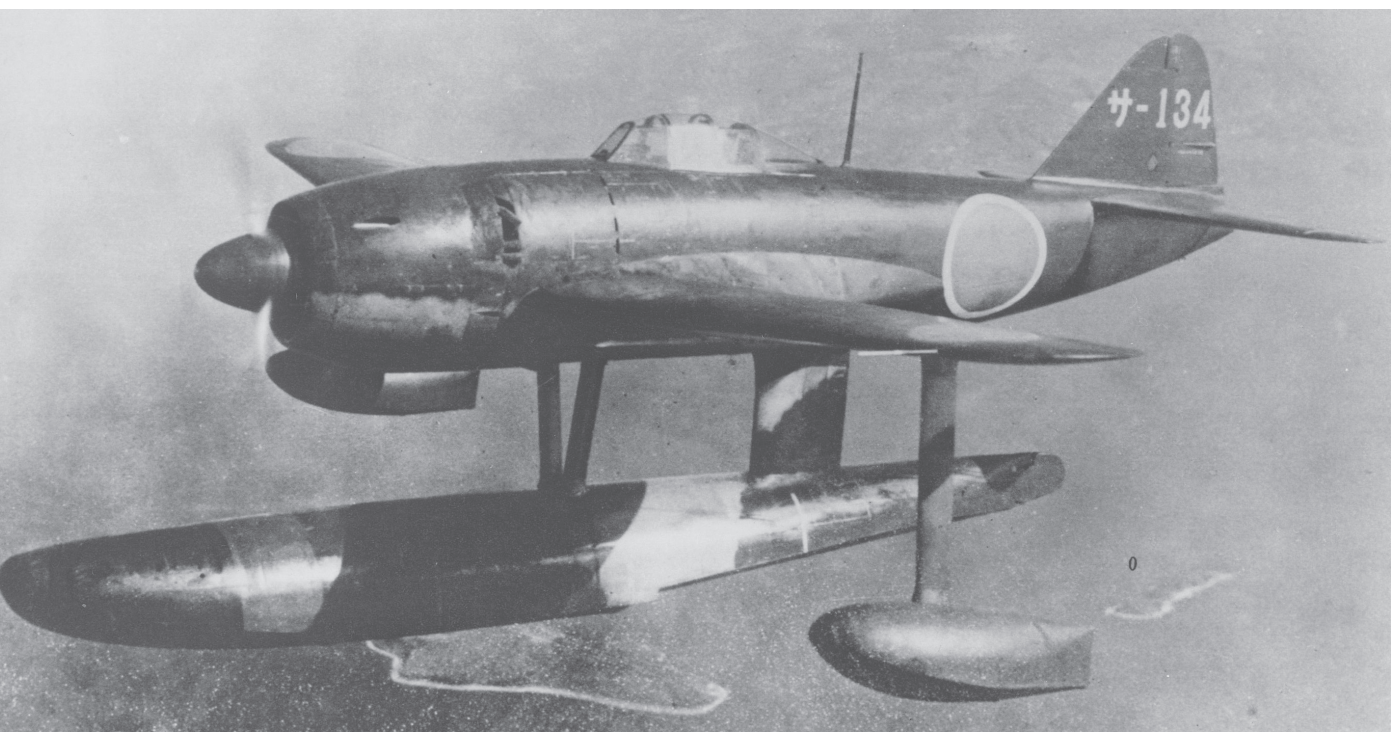
Once back at Yokosuka, Katsuki converted onto the Kyofu and was then posted to the 934th Kokutai shortly thereafter. He became an ace when he was credited with the destruction of a B-24 over Ambon on 16 or 19 January 1944. At least three Liberator kills and one probable were claimed by the 934th with the Kyofu, and an inconclusive engagement was also fought with PBY Catalinas too. When the 934th was transferred back to Japan minus its aircraft in March 1944, Katsuki transferred to the land-based 381st Kokutai and flew Zero-sens in combat over Balikpapan and Singapore, claiming two more victories. He returned to Japan in 1945 and flew with the 352nd Kokutai, which was equipped with a mixed fleet of Zero-sens, Raidens and Nakajima J1N1 Gekko ('Moonlight') fighters. By war's end Katsuki had claimed a total of eight victories.

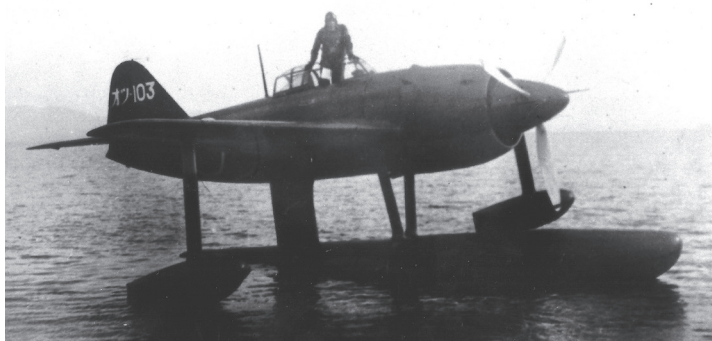
It is unlikely that any other aces enjoyed aerial success with the Kyofu during its brief time in the frontline, the handful of pilots who got to fly the



PO1c Kiyomi Katsuki was the only ace to claim a victory in the N1K1 Kyofu. Indeed, he was credited with scoring the seaplane's very first kill – a B-24 on 16 January 1944 while defending Ambon from attack. Katsuki subsequently flew Raidens with the 352nd Kokutai

China-based B-29 crews targeting Kyushu reported being sporadically intercepted by Kyofus serving with the Sasebo Kokutai in late 1944. The N1K1 enjoyed little success as a Home Defence fighter, however, proving unable to reach the high-flying bomber formations. This particular Kyofu from the Sasebo Kokutai (adorned with a Katakana 'SA' for Sasebo as part of its aircraft code) was photographed over Kyushu in September 1944 (via Philip Jarrett)





Kyofu pilots operating in the defence of Honshu were also unsuccessful in their attempts to attack B-29s flying from the Mariana Islands. This aircraft, from the Oh-tsu Kokutai (adorned with a Katakana 'OT' for Oh-tsu as part of its aircraft code), was photographed between missions on Lake Biwa, Japan's largest freshwater lake in west-central Honshu. The unit generated its Home Defence missions from here in 1944-45

The 381st Kokutai was the first frontline unit issued with J2Ms from late 1943, and the sento hikotai leader in charge of overseeing the unit's transition to the new fighter was China War veteran Lt Takeo Kurosawa. Soon checked out in the Raiden, he found the fighter to be better than the A6Ms he had previously flown in combat. However, Kurosawa quickly realised that it would take time for his less experienced charges to master the J2M



aircraft operationally appreciating the N1K1's impressive rate of climb but criticising its inferior manoeuvrability and range when compared to the A6M2-N. A buntai continued to fly a small number of them from Singapore after the 934th Kokutai left, and its pilots succeeded in damaging several B-29s during the 11 raids mounted on the island by XX Bomber Command from 5 November 1944. China-based

Superfortresses (flying from newly built airfields around Chengdu) were also sporadically intercepted by N1K1s flying from Kyushu, whilst Kyofus operating in the Honshu area attempted to attack B-29s from the Mariana Islands. The N1K1 enjoyed little success as a Home Defence fighter, however, proving unable to reach the high-flying bomber formations.

381st KOKUTAI INTO ACTION

On 1 October 1943 the 381st Kokutai was formed at Tateyama, on Tokyo Bay, as one of two fighter units raised to protect the vital Balikpapan oil refinery in Borneo. The three squadrons within the 381st were primarily equipped with A6M Zero-sens, although at least ten J2M2s were also issued to the kokutai, giving the Raiden its frontline debut. The hikotai leader in charge of overseeing the unit's transition to the new fighter was China War veteran Lt Takeo Kurosawa, who led ten pilots to Oppama in mid-October to commence the conversion. Here, they studied reports written up by Yokosuka Kokutai test pilots. Kurosawa was soon checked out in the Raiden, which he found to be better than the A6Ms he had previously flown in combat. However, he quickly realised that it would take time for his less experienced charges to master the J2M.

The runways at both Oppama and Tateyama were soon deemed to be too short for the safe operation of the Raiden by pilots under instruction, so in early November the 381st moved to Toyohashi, southeast of Nagoya – a bomber base used by G4M Rikko units. Of the ten or so Raidens assigned to the kokutai, typically only four or five were serviceable throughout the early months of the conversion due to a series of persistent problems with the temperamental fighter. Nevertheless, pilots pressed on with their training, undertaking aerial gunnery, bomber interception and formation flying. Flight endurance of the short-ranged Raiden was also evaluated.

It was not long before the kokutai suffered its first fatality. In mid-January the 30th J2M2 delivered to the IJNAF disintegrated directly overhead Toyohashi immediately after its pilot had made a firing pass at a target streamer. Although the cause of the aircraft's catastrophic structural failure was never properly explained to pilots on the unit, it was believed that a violent oscillation commenced when an engine attachment point broke, resulting in a secondary airframe failure. An alternative theory was that an incorrectly fastened cowling panel had broken away and taken off the tail of the fighter. Although the engine attachment points were duly

reinforced and the cowlings fasteners strengthened, there would be other Raidens that reportedly disintegrated in mid-air for no obvious reason.

Aside from this alarming trait, oscillation problems with the J2M's Kasei Model 23a engine and Sumitomo VDM propeller combination provided the 381st Kokutai with an endless series of problems that were never fully rectified. As a result, the unit departed for Balikpapan in March 1944 equipped exclusively with Zero-sens, and it would subsequently see considerable combat throughout the Dutch East Indies with the venerable Mitsubishi fighters. Finally, in early September, news reached the 381st that a small number of J2M3s had arrived in Manila by ship, and on the 8th of that month the first four Raidens were flown to Balikpapan. As many as ten aircraft were eventually operated by the unit's Sento 602nd Hokotai (squadron) for the air defence of Kendari, in the Celebes. Although only a handful of pilots were cleared to fly the J2M, there was no shortage of fuel thanks to the nearby oil refinery. This in turn meant plenty of training flights.

It would appear that the 381st Kokutai finally gave the Raiden its combat debut on 30 September 1944 when ten aircraft joined Zero-sens from the unit, and the 331st Kokutai, in opposing a raid by three groups of B-24s from the Fifth and Thirteenth Air Forces that were targeting Balikpapan from their base on Numfoor Island. At least one victory was credited to a Raiden pilot, although his identity remained unrecorded. Further successes were achieved on 3 October, when J2M3s vertically dived on low-flying B-24s from 3330 ft. The defending fighters suffered heavy casualties seven days later, however, when the previously unescorted Liberators were accompanied by almost 30 P-47 Thunderbolts and P-38 Lightnings flying an airstrip on the recently occupied Morotai Island. As many as 13 Zero-sens were destroyed, but the handful of Raidens managed to avoid the P-47s and P-38s and damage a B-24. Due to the ever-increasing fighter escort, the IJNAF's defence of Balikpapan soon ceased to be effective.

With the amphibious landings on Leyte on 20 October signalling the commencement of the Battle of the Philippines, the surviving Zero-sens of the 381st Kokutai were rushed to Mabalacat, on the Philippine island of Luzon, where they were immediately requisitioned for suicide attacks on the invasion fleet. The unit's few airworthy Raidens remained at Kendari, however, from where they flew a series of convoy escort missions for IJN vessels sailing off northern Borneo. In early November the J2M3s were sent to Nichols Field, south of Manila, and ordered to intercept USAAF bombers targeting the Philippine capital. The aircraft failed to see a single enemy aircraft during their month at the base, the handful of Raidens that remained airworthy being sent back to Kendari to defend Balikpapan during December.

Again, the expected large raids on the nearby oil refinery failed to materialise, although on 1 January 1945 Raidens and Zero-sens shared in the destruction of a B-24 on a reconnaissance mission. The following month, Lt(jg) Keishichiro Hattori (who later served with the 343rd Kokutai) took off with his wingman to intercept a lone B-24 that had been detected approaching the area at dusk. In what was probably the only night victory credited to the Raiden, Hattori attacked the bomber, which was subsequently seen to be trailing flames by observers on the ground. February also saw the destruction of a second B-24 by CPO Masayuki



Two ex-381st Kokutai J2M3s were returned to airworthiness by the RAF, with the help of Japanese personnel, in early 1946. They were then flown by IJNAF pilots working with the Allied Technical Air Intelligence Unit South-East Asia (ATAIU-SEA) from the former IJNAF airfield at Tebrau, on the Malayan mainland. These flights were for the benefit of the press or visiting VIPs, as there is no evidence to suggest that any performance measurements or equipment evaluations were made. The ATAIU-SEA flew five different IJNAF and JAAF types during this period (*via Philip Jarrett*)

Kutami, who subsequently flew N1K2-Js with the 343rd Kokutai's Sento 407th Hikotai until he was killed in action on 8 August. Fighting four USAAF Thunderbolts that were defending a raid by B-29s on the steel works at Yawata, in Kyoto Prefecture, Kutami bailed out of his stricken fighter and was shot dead whilst hanging beneath his parachute.

In April 1945 all surviving IJNAF fighter units in the Southwest Pacific area were ordered home to Japan. The few remaining Raidens of the 381st Kokutai only made it as far as Singapore, where they were discovered by the RAF at war's end. With the help of Japanese personnel, two examples were returned to airworthiness and flown by IJNAF pilots working with the Allied Technical Air Intelligence Unit South-East Asia from the former IJNAF airfield at Tebrau, on the Malayan mainland.

301st KOKUTAI'S COMBAT FAILURE

Although the 381st Kokutai achieved only modest success with the Raiden, it at least saw combat with the temperamental Mitsubishi fighter, which is more than can be said for the second unit formed to fly the Raiden. The 301st Kokutai was established on 5 November 1943 at Yokosuka, the IJNAF planning on employing it with the 26th Air Flotilla in the defence of the strategically important fleet base at Rabaul. Veteran naval aviator Cdr Katsutoshi Yagi was put in command of the kokutai, and Battle of Midway ace Lt Iyozo Fujita was one of his sento hikotai leaders – Fujita had claimed ten aircraft (seven of them shared) in a single mission flying from *Soryu* during the pivotal June 1942 carrier clash at Midway.

Equipment of the 301st with Raidens proved to be a laborious process, for the 381st Kokutai had priority when it came to receiving new aircraft from Mitsubishi. Things only began to improve when the latter unit re-equipped primarily with Zero-sens in the early spring of 1944.

With the war in the Southwest Pacific going badly for Japan, and Rabaul effectively neutralised by Allied bombing, the 301st was reassigned to the 22nd Air Flotilla in February 1944. It would now be tasked with helping to defend Truk Atoll and the Mariana Islands in the central Pacific. A short while later the 301st was reorganised to include a sento hikotai (316th) equipped with Zero-sens operating alongside its Raiden-equipped squadron (601st). Throughout March the unit worked hard training its pilots, with bomber interception being practised over and over again. Combat veterans like Yagi and Fujita soon realised that the best way to attack a bomber in a Raiden was from directly above in a near vertical dive, as few Allied fighters could stay with the aircraft during such a manoeuvre. Perfecting this tactic during gunnery passes on towed banners, pilots quickly discovered that the shells from their slow-firing 20 mm cannon usually fell behind the target during such attacks. This problem was solved by canting the wing-mounted weapons upward by a full degree – a modification Mitsubishi soon introduced on the Raiden production line.

By 1 May the 301st Kokutai's Sento 601st Hikotai had 60 J2M2s on strength, 40 of which were serviceable. Most of these aircraft had been test flown at Mitsubishi's Suzuka plant by pilots from the 601st prior to them flying the fighters 250 miles back to Oppama, where the unit was based. The aircraft's notorious reputation for unreliability meant that there were several accidents during the test flights, including one involving China War veteran and ace Ens Akio Matsuba. The engine in his brand new fighter suffered a sudden loss of oil pressure and then seized during a test flight from Suzuka, forcing Matsuba to conduct a high-speed forced landing with the fighter's undercarriage retracted. Not a fan of the Raiden before this incident, Matsuba (who claimed the J2M was 'difficult to fly') duly reverted to flying an A6M5 whenever possible.

On 29 May, 49 Raidens and 20 Zero-sens departed Oppama for Tateyama on the first leg of the kokutai's flight to Truk Atoll. From there, Sento 316th Hikotai sent some of its fighters (which had greater endurance than the Raidens) to Tinian, in the Mariana Islands, whilst others went to Iwo Jima. They were immediately thrown into action against US Navy carrier-based aircraft. Sento 601st Hikotai was stymied in its efforts to reach Iwo Jima (almost 700 miles from Tateyama) by persistently poor weather, the Raidens taking off and then returning to base on several occasions.

Eventually, Sento 601st Hikotai was supplied with 40 A6M5s, and these aircraft reached Iwo Jima in two waves on 21 and 25 June. The fighters were soon destroyed in a series of fiercely contested actions that saw a handful of former Raiden pilots enjoy success in aerial combat. Amongst those to claim victories were Ens Matsuba (five kills, including three F6F Hellcats, and one probable) and CPO Akeshi Ochi (one victory), who would subsequently gain fame as the first J2M pilot in the 332nd Kokutai to down a B-29. With all their aircraft destroyed – either shot down or blown up on the ground by a devastating naval bombardment on 4 July – surviving pilots were flown back to Japan by transport aircraft. The 301st Kokutai was disbanded on 10 July 1944.



Battle of Midway ace Lt Iyozo Fujita was posted in as a sento hikotai leader upon the establishment of the 301st Kokutai in November 1943. Fujita had claimed ten aircraft (seven of them shared) in a single mission flying from *Soryu* during the pivotal June 1942 clash at Midway. He scored a number of victories flying A6Ms with the 301st, prior to being transferred to the Shiden-equipped 341st Kokutai as buntai leader of Sento 402nd Hikotai in mid-1944



RAIDENS ON FORMOSA AND IN CHINA

Although there were no frontline IJNAF fighter units equipped with Raidens on Formosa (now Taiwan), a handful of J2Ms were in fact sent to the island to help defend its strategically important harbours during the autumn of 1944. The Tainan Kokutai and the 2nd Takao Kokutai (both training units) were each allocated four Raidens. Only one reached Tainan, however, with the remaining three being destroyed in accidents en route from Japan. The pilot of that solitary aeroplane, Lt(jg) Yoshihiro Aoki, engaged a China-based P-38 with the J2M during a USAAF fighter sweep over Formosa in September and was almost shot down in the ensuing dogfight. He was later transferred to the 352nd Kokutai.

Three Raidens made it to Takao (now Kaohsiung), in southwestern Formosa, in late July 1944, and two of these were soon written off in accidents. The only action seen by the 2nd Takao Kokutai with the sole surviving aeroplane came in late 1944 when an unnamed NCO pilot tried, unsuccessfully, on several occasions to intercept lone F-13 (camera-equipped B-29) reconnaissance aircraft overflying Formosa. This aircraft was eventually abandoned at Takeo when the IJNAF ordered its fighter pilots back to Japan in early 1945.

The presence of B-29s with XX Bomber Command in western China (codenamed Operation *Matterhorn*) from the summer of 1944 meant that the USAAF now had the means by which to attack targets in Japan itself. In an effort to counter this ominous threat, the IJNAF bolstered its modest fighter strength in Shanghai during the autumn of that year. The Zero-sen-equipped 256th Kokutai, which had been formed at Shanghai's Longhua airfield in February 1944, duly received three Raidens in October of that same year. Several attempts were made by mixed formations of A6M3/5s and J2M2s to intercept the high-flying B-29s en route to Japan, but these met with no success. The bulk of the unit's fighter force was then sent to Luzon to improve the defence of the Philippines, although the Raidens remained at Longhua. The 256th eventually disbanded on 15 December, at which point the three J2Ms became the Shanghai detachment of the 951st Kokutai.

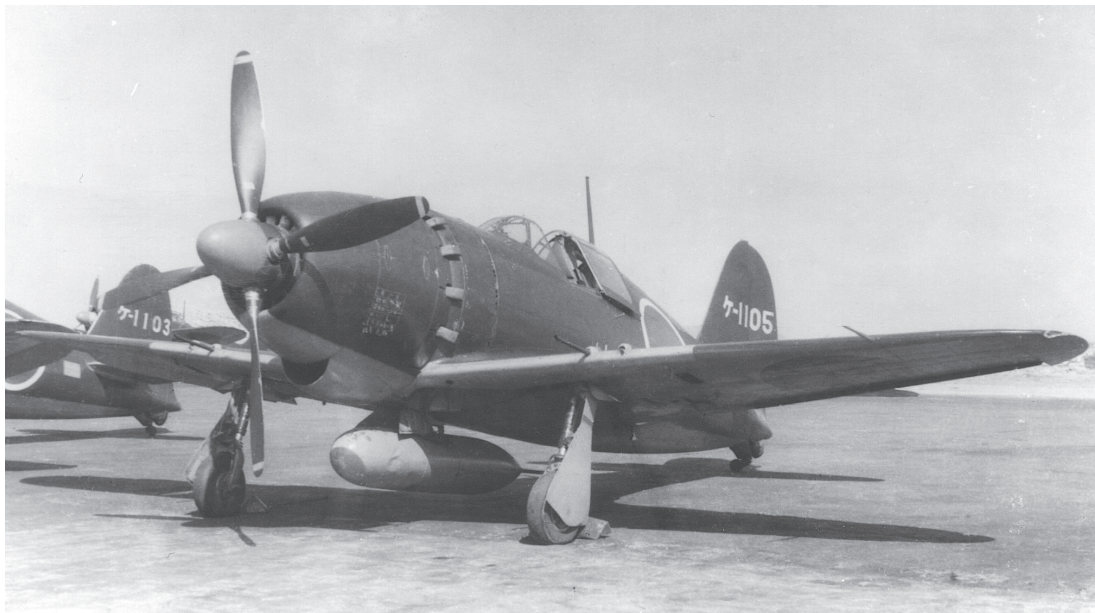
No records have yet been uncovered relating to the Raiden's success, or otherwise, in combat in China. What is known is that the three original fighters from the 256th Kokutai, along with 12 A6Ms and six B5N torpedo-bombers, were destroyed in a strafing attack by P-51 Mustangs on Longhua on 17 January 1945. Three replacement Raidens were quickly sent to China, and when the 951st detachment was disbanded on 25 February, the aircraft were assigned to the newly created Chushi Kokutai. Its A6Ms and J2Ms sporadically intercepted raiding Mustangs during the remaining months of the war, resulting in a handful of casualties being suffered by the kokutai – on 2 April buntai leader Lt Hayasaki was killed in action, and on 23 May one of four Raidens and two Zero-sens that engaged USAAF P-51s were shot down.

A small number of J2Ms were issued to the training flights of the Yatabe and Konoike Kokutai in Japan, as well as the Genzan Kokutai in Korea. It is highly doubtful that any of these aircraft saw combat, however.



Only one Raiden was flown by the Tainan Kokutai on Formosa, its pilot usually being Lt(jg) Yoshihiro Aoki. He engaged a China-based P-38 with the J2M during a USAAF fighter sweep over Formosa in September 1944 and was almost shot down in the ensuing dogfight. Aoki was later transferred to the Raiden-equipped 352nd Kokutai

LEFT China War veteran and ace Ens Akio Matsuba served with the 301st Kokutai's Sento 601st Hikotai, and he experienced the aircraft's notorious reputation for unreliability at firsthand. The engine in his brand new J2M3 suffered a sudden loss of oil pressure and then seized during a test flight from Suzuka, forcing Matsuba to conduct a high-speed forced landing. Not a fan of the Raiden before this incident, Matsuba reverted to flying an A6M5 whenever possible



302nd KOKUTAI IN HOMELAND DEFENCE

The first Raiden-equipped unit formed exclusively as an air defence unit for the home islands was the 302nd Kokutai. With air raids imminent from bases in China, the JAAF commenced preparations for homeland defence in early 1944. The IJNAF followed suit, although its efforts were focused on the protection of three key naval harbours – Yokosuka, Kure and Sasebo. The defence of Yokosuka, near Yokohama, was to be provided by the 302nd Kokutai, which formed on 1 March 1944 at Oppama and then moved to Kisarazu, on Tokyo Bay. The unit was supposed to be equipped with 48 interceptors (J2Ms) and 24 nightfighters (J1N1s), split between two sento hikotai. With the 301st Kokutai then having priority for newly built Raidens, the 302nd initially had to make do with a small number of pre-production J2M2s (painted bright orange to denote their non-combat-worthy status) and surplus Zero-sens.

The pilots posted into the unit were also a ‘mixed bunch’, with the majority of them being young and inexperienced. However, there were some combat veterans within the ranks too, including 34-year-old Ens Sadaaki Akamatsu. A pilot in the IJNAF since 1932, he had claimed 11 victories during the campaign in China. Seeing plenty of action with the 3rd and 331st Kokutai in the Philippines, the Dutch East Indies and during the December 1943 attack on Calcutta, Akamatsu (who, according to fellow high-scoring ace Saburo Sakai, was ‘outrageously temperamental, eccentric and quite violent’) would be a stalwart within the 302nd through to war’s end.

Another ace to serve with the unit was CPO Yoshio Nakamura, who had survived the fierce battles over Rabaul and the Russell Islands with the 6th Kokutai in 1942–43. Sent back to Japan in January 1944, he joined the 302nd upon its formation. Nakamura would subsequently serve with the 343rd Kokutai until war’s end.

A small number of J2Ms were issued to the training flights of the Yatabe and Konoike Kokutai in Japan, as well as the Genzan Kokutai in Korea – this factory-fresh J2M3, equipped with a 300-litre drop tank, was assigned to the latter unit. Although these fighters were combat capable, it is debatable whether any of them saw action (*via Philip Jarrett*)



Ace Ens Chitoshi Isozaki transferred to the 343rd Kokutai following service with the 302nd Kokutai. He failed to add to his tally of 12 victories whilst flying the Raiden or the Shiden-Kai, however

Although not an ace, combat-experienced pilots like PO1c Takumi Sugitaki were valuable additions to the 302nd Kokutai, playing an important role in training naval aviators new to high performance piston-engined fighters. Zero-sens were heavily utilised by the novice pilots flying with the kokutai from Kisarazu, the J2Ms initially being reserved for veterans only



Ace Ens Chitoshi Isozaki was also transferred to the 343rd following service with the 302nd, the veteran pilot having joined the IJNAF in 1932. Following 18 months of combat (none of it involving enemy aircraft, however) in China, Isozaki finally claimed his first of 12 victories with the 251st Kokutai over the Russell Islands in June 1943. Surviving six months of brutal combat as a buntai leader with the 201st Kokutai over Buin and Rabaul later that same year, he then served with the 302nd and 210th Kokutai prior to joining the 343rd Kokutai's 302nd Hikotai as a buntai leader in May 1945.

Although not aces, combat-experienced pilots CPO Takehiko Baba, WO Tsuguo Shikada and PO1c Takumi Sugitaki were valuable additions to the 302nd Kokutai, and they played an important role in training naval aviators new to high-performance piston-engined fighters. Zero-sens were heavily utilised by the novice pilots flying from Kisarazu, with the J2Ms initially being reserved for veterans only. Isozaki was amongst the first pilots in the 302nd to convert onto the Raiden, and he commented on how spacious the fighter's cockpit was in comparison to the Zero-sen. He thought that the J2M was inferior to the A6M in horizontal manoeuvrability, however, although its greater speed and rate of climb made it a better bomber interceptor. Isozaki also stated that the Raiden was both faster and more stable in a dive than the Zero-sen thanks to it being the heavier of the two fighters – the J2M3 weighed 1500 lb more than the A6M5 when fully loaded with fuel and ordnance.

Having quickly mastered the Raiden, Akamatsu instructed pilots on four-aircraft formation flying. He also put individual aviators through their paces as his wingmen. Finally, Akamatsu ensured that all pilots were shown how to deadstick land the Raiden. This proved to be a vital skill, as the serviceability rate amongst the aircraft supplied to the 302nd Kokutai was particularly poor – rarely more than a third of its Raidens were airworthy at any one time – for its J2Ms were supplied by the nearby Koza Kaigun Kokusho. By the spring of 1944 its workforce consisted primarily of teenage boys.

The 302nd Kokutai eventually moved to Atsugi, 20 miles northwest of Yokosuka, in late May 1944 after the 301st Kokutai vacated the airfield for Truk. The unit inherited a number of Raidens that had been left behind, thus at last giving the kokutai its stated operational strength of 48 J2Ms on 1 July – 33 of these fighters were serviceable on this date.

The CO of the 302nd throughout its brief existence was Capt Yasuna Kozono, who had seen action in China in the late 1930s and then led the 251st Kokutai in action in Rabaul in 1942-43. During this period he had overseen the kokutai's transition from day fighters to nightfighters, Kozono also ordering the fitment of oblique-firing guns (similar to those used so successfully by German nightfighters) to a number of the J1N1s assigned to the unit. These enjoyed some success against USAAF bombers targeting Rabaul at night, and he also suggested that a handful of Raidens be duly modified in the 302nd Kokutai. Despite opposition from a number of his pilots, Kozono got his way, as several J2M3s were indeed fitted with a single 20 mm cannon mounted obliquely below the cockpit on the left side of the fuselage.

In September all the Raidens and Zero-sens were assigned to 1st Hikotai, which was led by Lt Kushichiro Yamada. He had experienced combat flying A6M2-Ns in the Aleutians in 1942 with the 5th Kokutai. There were two J2M-equipped buntais within 1st Hikotai, and they were

led by Lt Tomiya Miyazaki (a former classmate of aces Naoshi Kanno and Hideo Katori) and Lt(jg) Susumu Itoh. The latter was also a former floatplane pilot, having flown them from cruisers and submarines since 1934. Indeed, Itoh had flown a small Yokosuka E14Y reconnaissance floatplane over Suva (Fiji), Nouméa (New Caledonia), Sydney (24 hours before the midjet submarine attack) and Auckland harbours during a series of daring nocturnal sorties from the submarine *I-21* in 1942. The remaining hikotai within the 302nd were equipped with J1N1s, A6M3/5s, D4Y2 Suiseis and P1Y2-S Kyokkos, all of which were used as nightfighters.

The first B-29s destined to attack targets in Japan from the central Pacific arrived at Isley Field, on Saipan, in mid-October, these aircraft being assigned to XXI Bomber Command's 73rd Bomb Wing. On 1 November a lone F-13A of the 3rd Photo Reconnaissance Squadron departed Saipan and headed for Tokyo, overflying the Japanese capital at a height of 32,000 ft. This was the first American aircraft to venture over Tokyo since the Doolittle Raiders on 18 April 1942. That same day, the 302nd Kokutai was in the middle of holding a promotion ceremony at Atsugi when the contrail of the lone Superfortress was spotted by the personnel on parade. Minutes later a warning siren sounded and the unit scrambled 11 Raidens, eight A6M nightfighters and nine J1N1s. CPO Ryuji Yagi was the first pilot to pass 20,000 ft in pursuit of the F-13A, which was heading back out to sea by the time he reached this altitude in his J2M3.

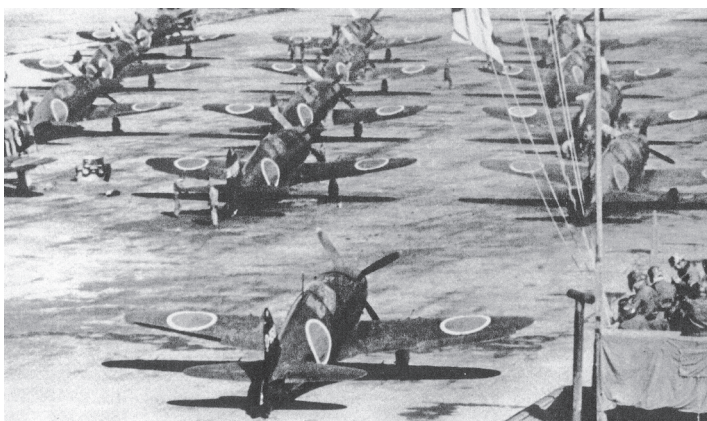
The USAAF aircraft, having spent 35 minutes over Tokyo, returned to Saipan with exposed film that revealed the location of the various aircraft manufacturing plants around the capital. The photographs that were generated from this sortie proved invaluable for mission planners tasked with identifying targets for XXI Bomber Command's impending offensive against the home islands.

The 302nd Kokutai's next encounter with USAAF heavy bombers came on 24 November when a formation of 111 B-29s targeted Tokyo for the first time. The bombers were spotted at 1100 hrs by an observer post on the Bonin Islands heading for Nakajima's Musashino engine plant at Mitaka. No fewer than 109 fighters (including 48 Raidens) were scrambled from Atsugi by the kokutai and told to head for Miura Peninsula. This proved to be too far south of the route taken by the B-29s on their approach to the target, and the kokutai claimed just one bomber damaged for the loss of two fighters (both through mechanical failure). Although the unit had failed to disrupt (*Text continues on page 39.*)

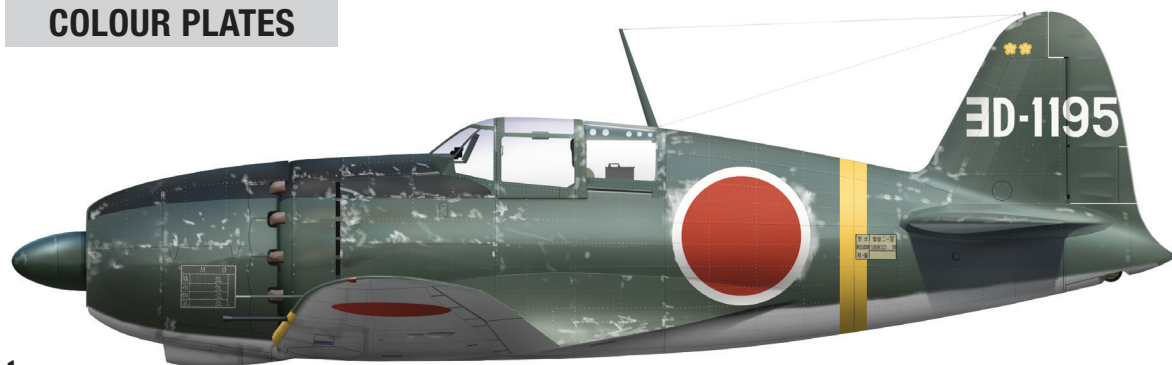


Although of poor quality, this photograph shows one of several J2M3s fitted with a single 20 mm cannon mounted obliquely below the cockpit on the left side of the fuselage – the gun port for the weapon can be seen within the bare metal panel immediately below the cockpit. Despite opposition from a number of pilots, this modification was championed by the CO of the 302nd Kokutai, Capt Yasuna Kozono. Note the two victory symbols on the fighter's fin tip

There was no need to disperse aircraft at Atsugi, or at any other military airfield in Japan for that matter, when this photograph was taken in the late summer of 1944, as the first attack by enemy aircraft was still several months away. As can be seen, all 302nd Kokutai J2Ms were uniformly marked

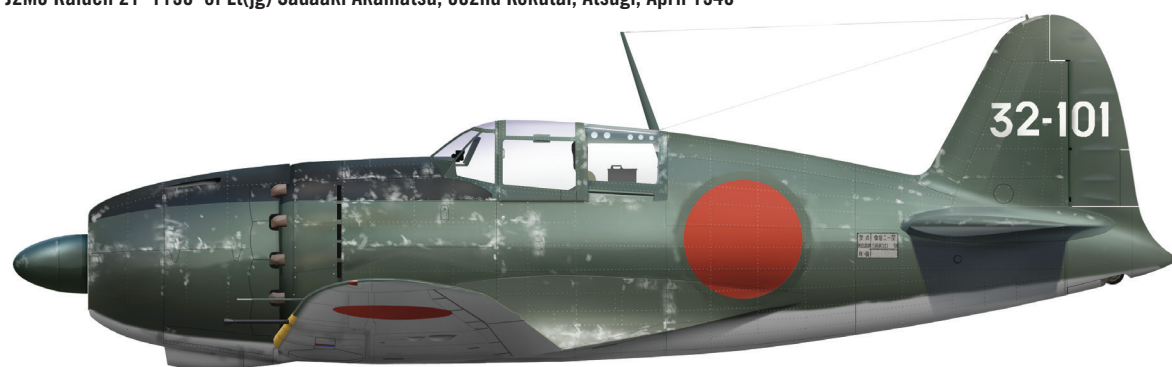


COLOUR PLATES



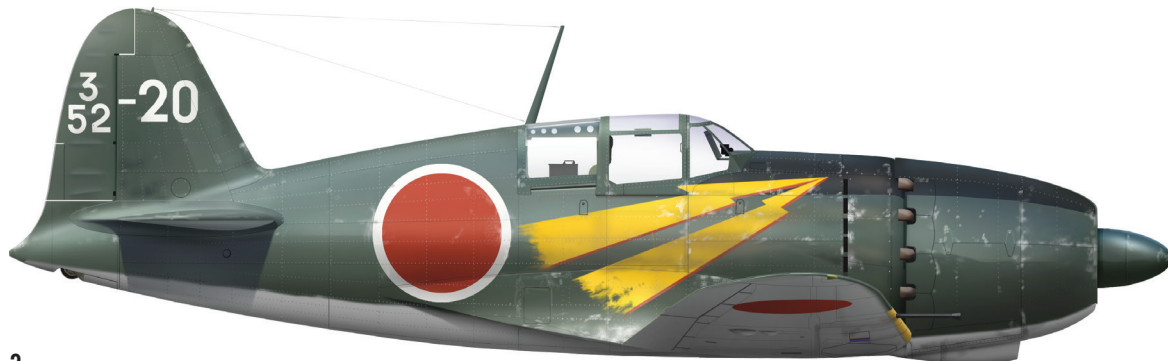
1

J2M3 Raiden 21 '1195' of Lt(jg) Sadaaki Akamatsu, 302nd Kokutai, Atsugi, April 1945



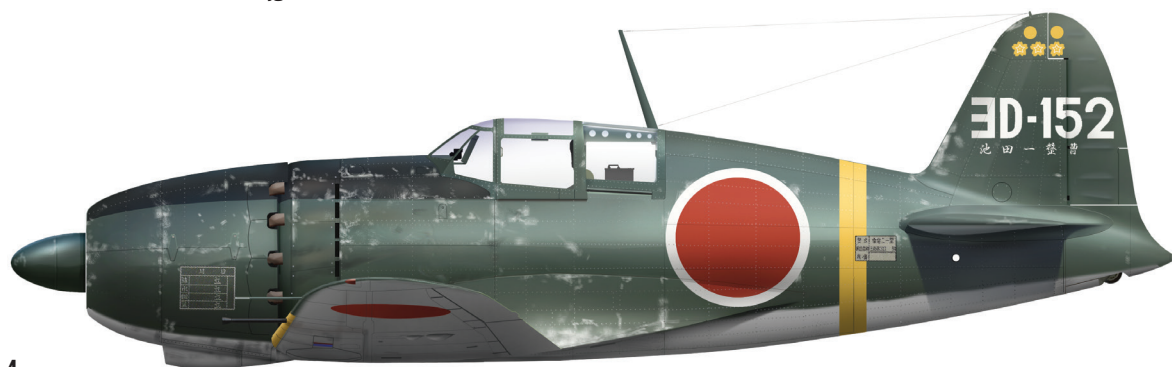
2

J2M2 Raiden 11 '32-101' of CPD Akeshi Ochi, 332nd Kokutai, Naruo, December 1944



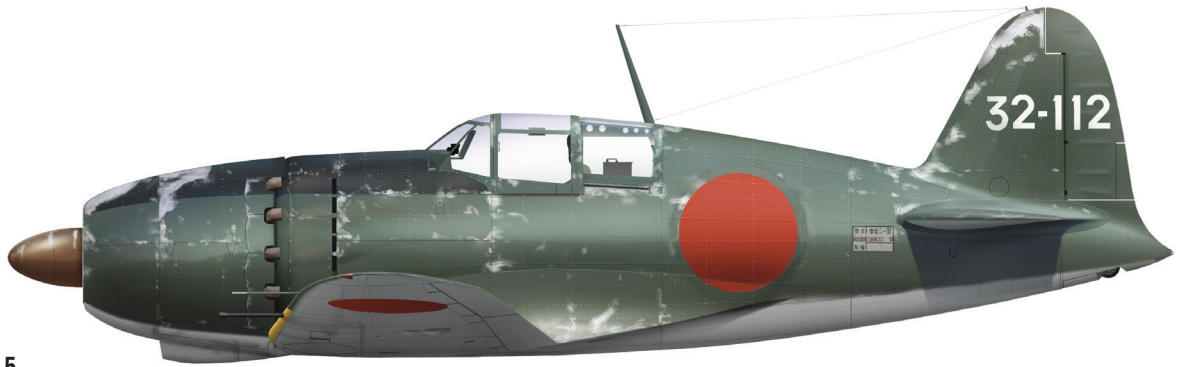
3

J2M3 Raiden 21 '352-20' of Lt(jg) Yoshihiro Aoki, 352nd Kokutai, Omura, March 1945



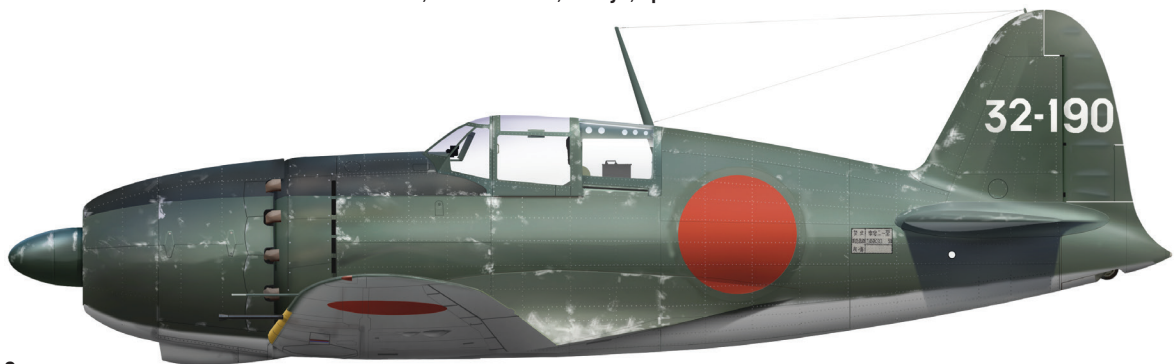
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J2M3 Raiden 21 '152' of Lt Susumu Itoh, 302nd Kokutai, Atsugi, April 1945



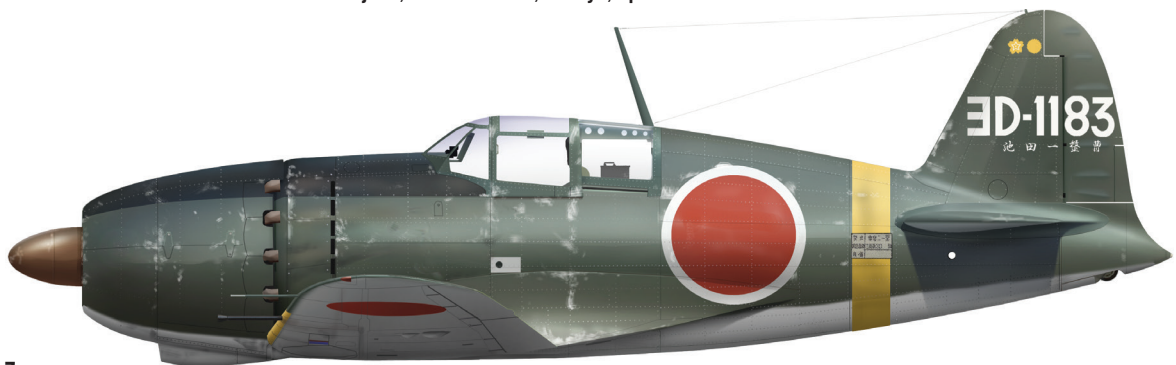
5

J2M3 Raiden 21 '32-112' of WO Susumu Ishihara, 332nd Kokutai, Kanoya, April 1945



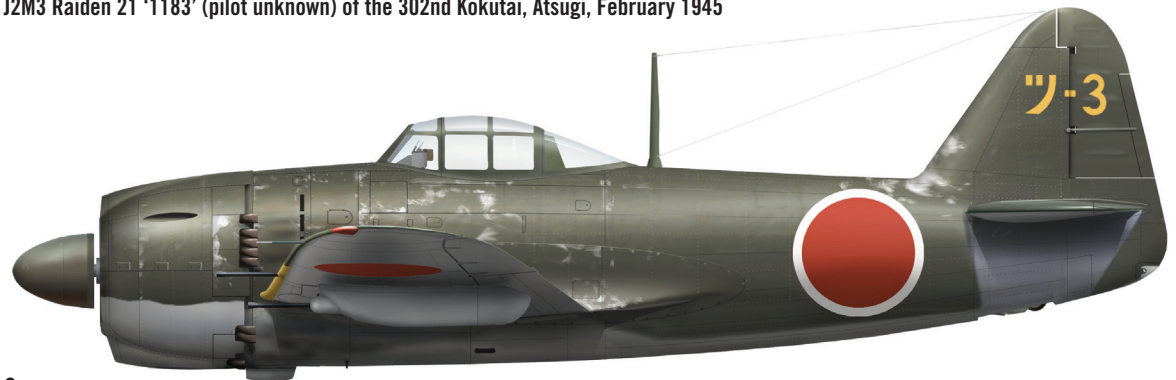
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J2M3 Raiden 21 '32-190' of Lt Kohei Nakajima, 332nd Kokutai, Kanoya, April 1945



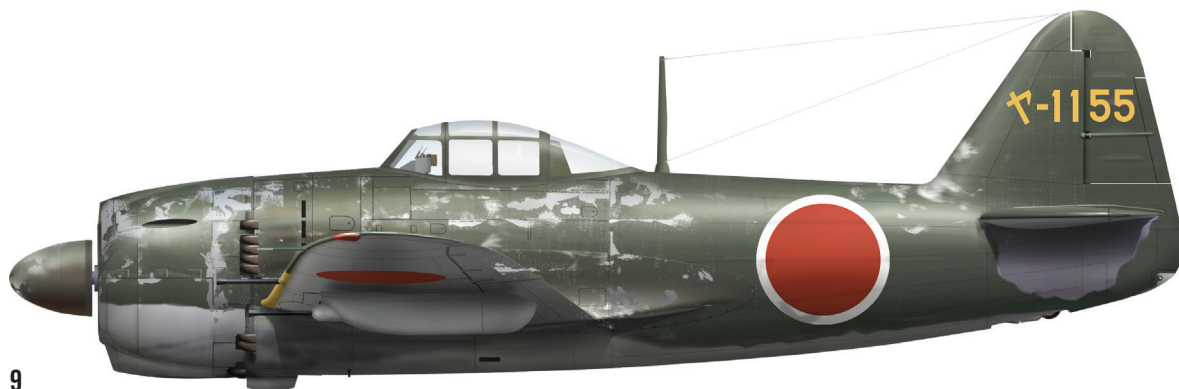
7

J2M3 Raiden 21 '1183' (pilot unknown) of the 302nd Kokutai, Atsugi, February 1945



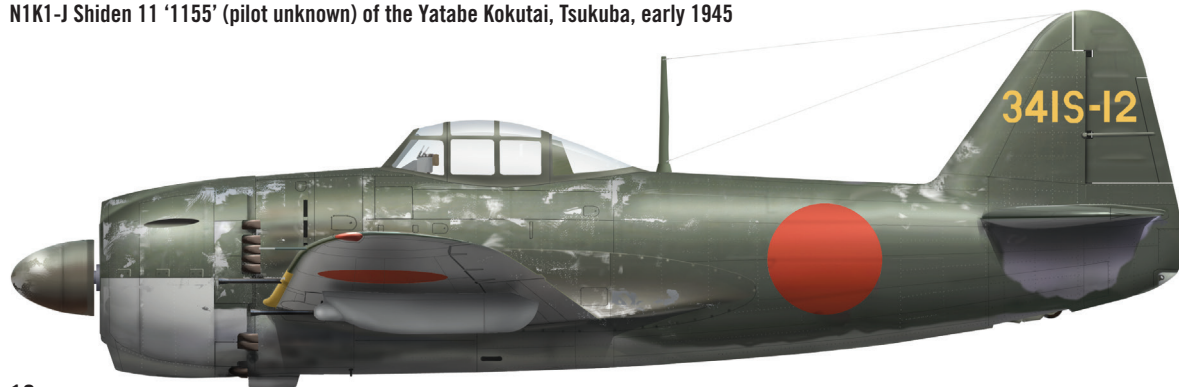
8

N1K1-J Shiden 11 '3' of CPO Tomeshiro Hiro, Tsukuba Kokutai, Tsukuba, February 1945



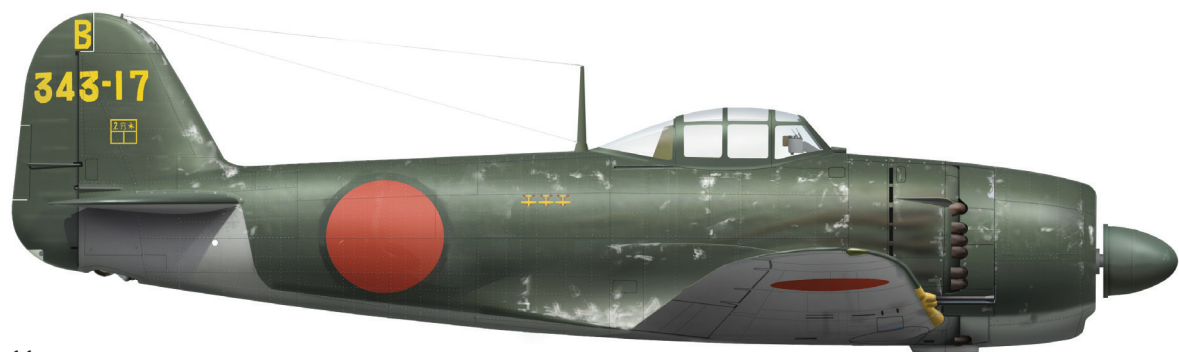
9

N1K1-J Shiden 11 '1155' (pilot unknown) of the Yatabe Kokutai, Tsukuba, early 1945



10

N1K1-J Shiden 11 '341S-12' (pilot unknown) of the 341st Kokutai, Marcott, Luzon, late October 1944



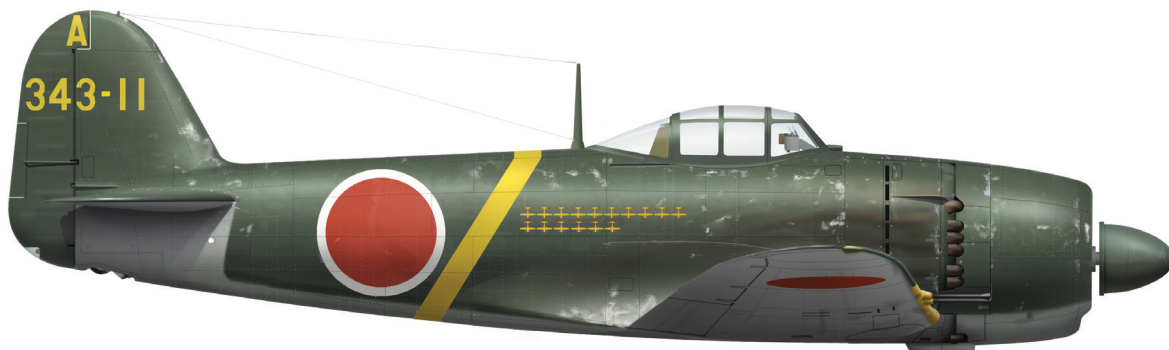
11

N1K2-J Shiden-Kai 21 '343-B-17' of LA Ikuji Matsumura, 343rd Kokutai, Kokubu No 1, April 1945



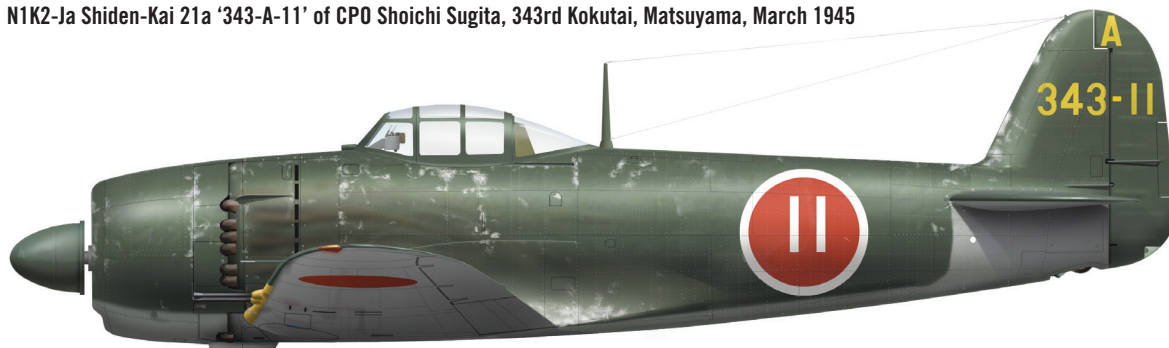
12

N1K2-J Shiden-Kai 21 '343-A-02' of Lt Masaji Matsumura, 343rd Kokutai, Matsuyama, March 1945



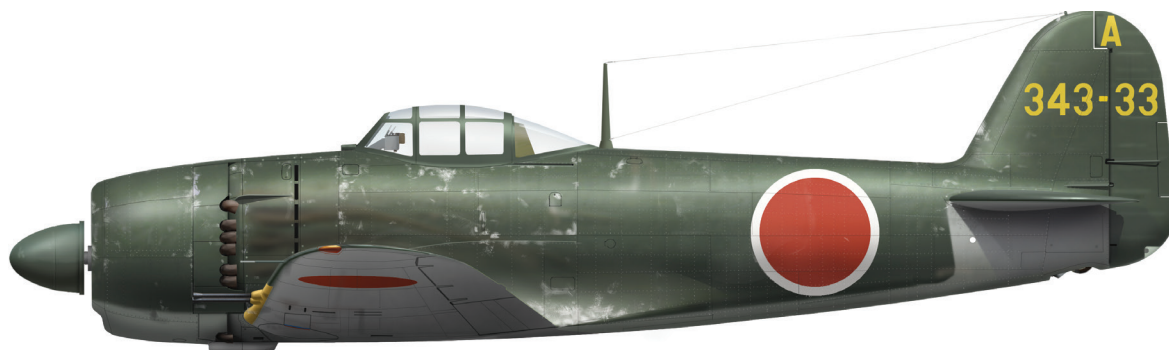
13

N1K2-Ja Shiden-Kai 21a '343-A-11' of CPO Shoichi Sugita, 343rd Kokutai, Matsuyama, March 1945



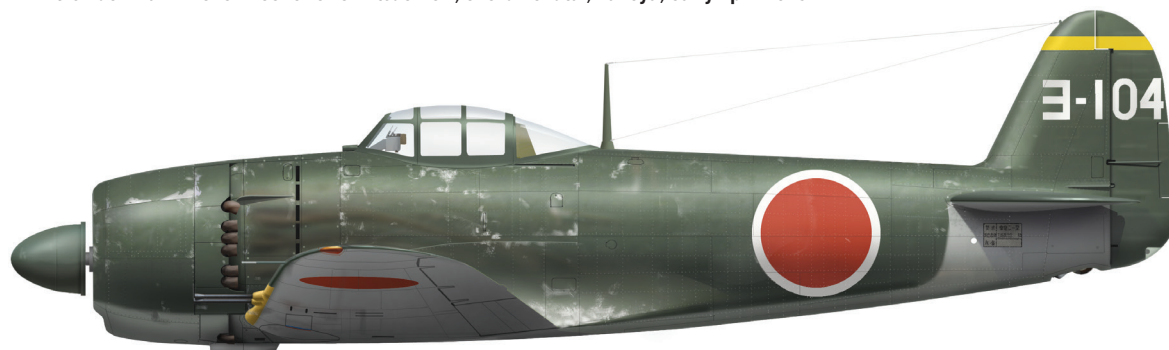
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N1K2-J Shiden-Kai 21 '343-A-11' of CPO Shoichi Sugita, 343rd Kokutai, Kanoya, early April 1945



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N1K2-J Shiden-Kai 21 '343-A-33' of CPO Mitsuo Hori, 343rd Kokutai, Kanoya, early April 1945



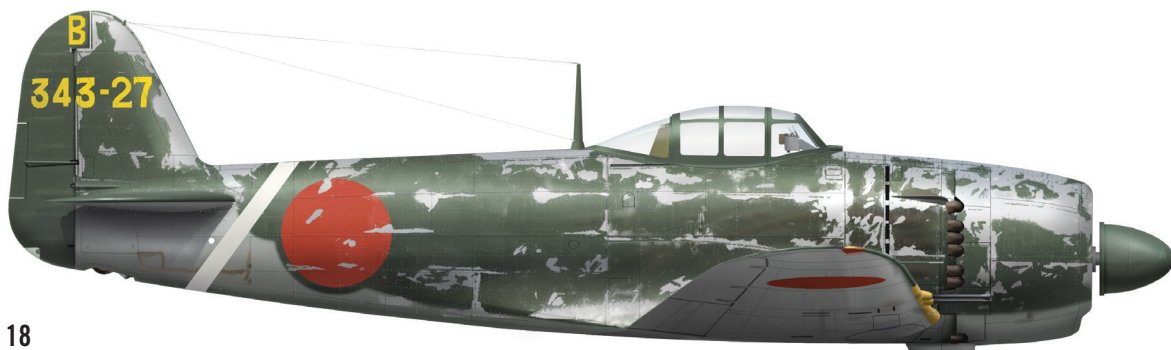
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N1K2-Ja Shiden-Kai 21a '104' of WO Kaneyoshi Mutoh, Yokosuka Kokutai, Oppama, February 1945



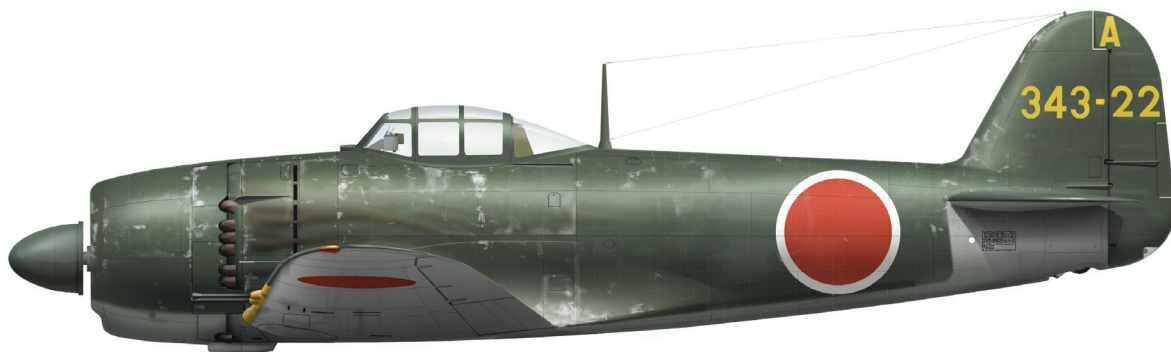
17

N1K2-J Shiden-Kai 21 '343-A-15' of Lt Naoshi Kanno, 343rd Kokutai, Matsuyama, early April 1945



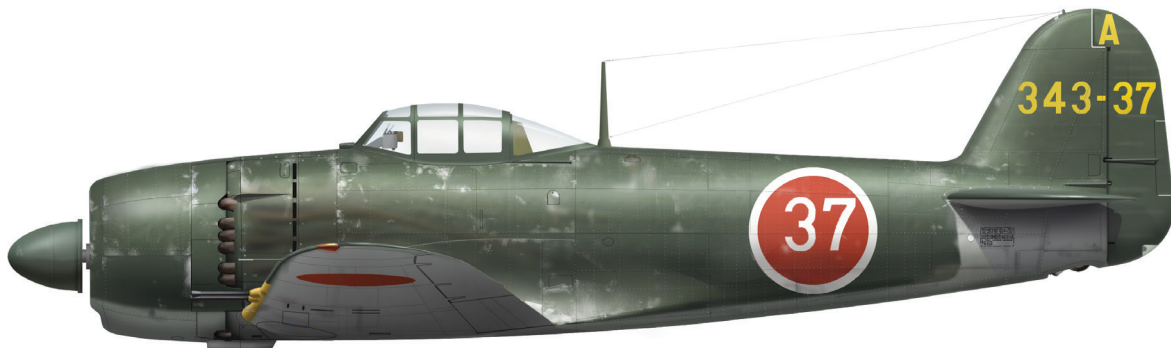
18

N1K2-Ja Shiden-Kai 21a '343-B-27' of WO Isamu Miyazaki, 343rd Kokutai, Omura, May 1945



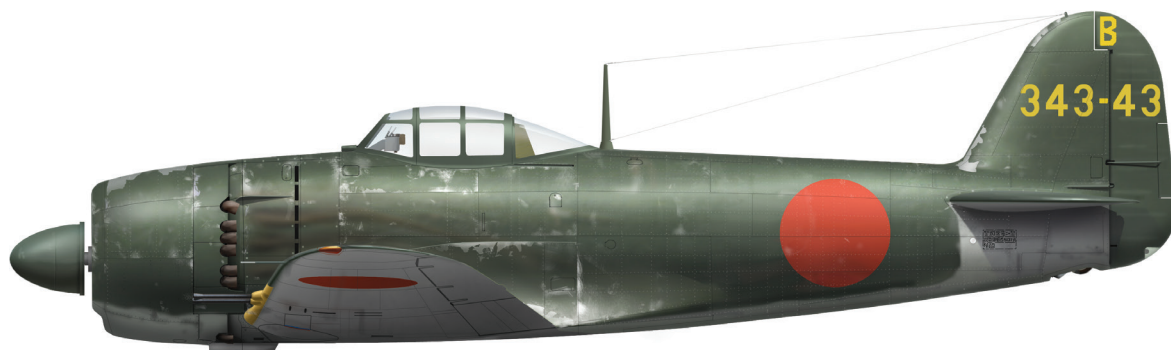
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N1K2-J Shiden-Kai 21 '343-A-22' of CPO Tomokazu Kasai, 343rd Kokutai, Kanoya, April 1945

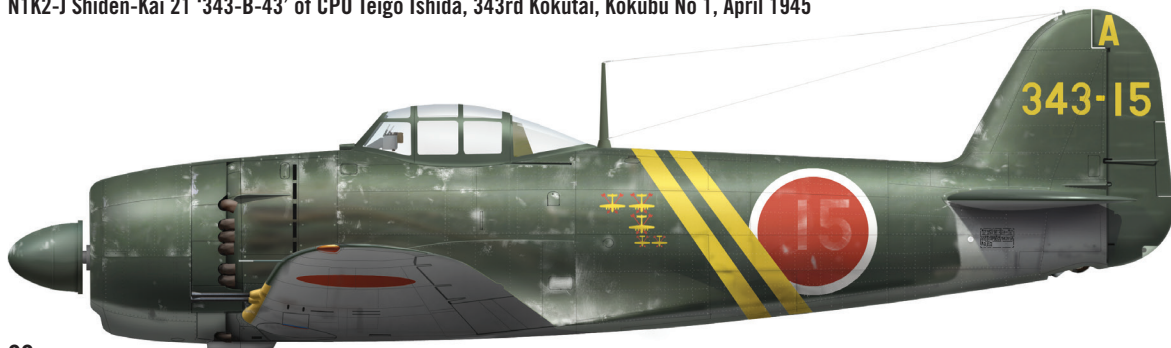


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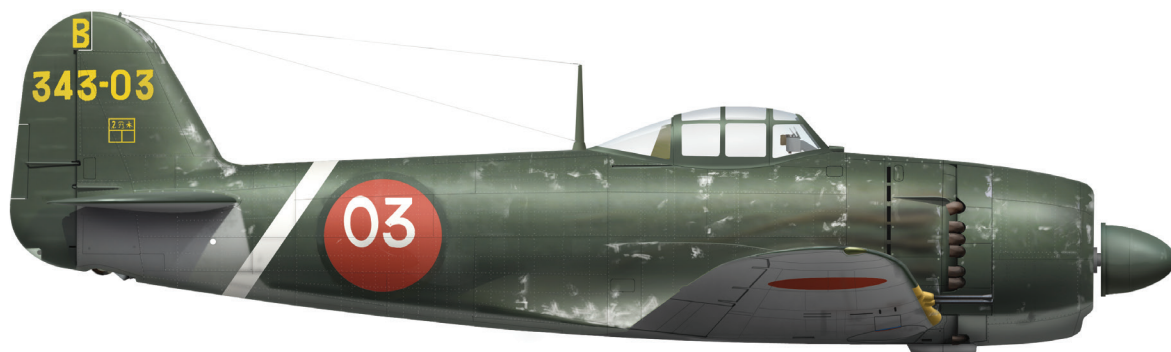
N1K2-J Shiden-Kai 21 '343-A-37' of WO Isamu Miyazaki, 343rd Kokutai, Matsuyama, March 1945



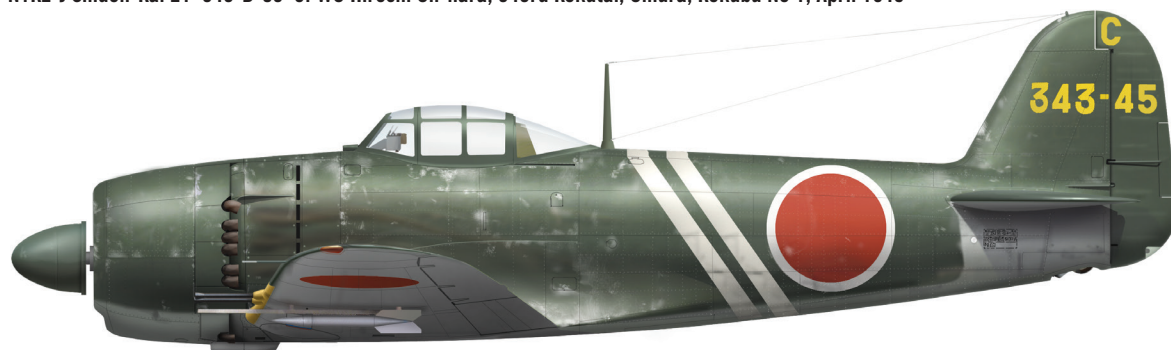
21
N1K2-J Shiden-Kai 21 '343-B-43' of CPO Teigo Ishida, 343rd Kokutai, Kokubu No 1, April 1945



22
N1K2-J Shiden-Kai 21 '343-A-15' of Lt Naoshi Kanno, 343rd Kokutai, Omura, May 1945



23
N1K2-J Shiden-Kai 21 '343-B-03' of WO Hiroshi Oh-hara, 343rd Kokutai, Omura, Kokubu No 1, April 1945



24
N1K2-J Shiden-Kai 21 '343-C-45' of Lt Takashi Oshibuchi, 343rd Kokutai, Omura, May 1945



Amongst the handful of aces to serve with the 302nd Kokutai was CPO Yoshio Nakamura, who had survived the fierce battles over Rabaul and the Russell Islands with the 6th Kokutai in 1942-43. Sent back to Japan in January 1944, he joined the 302nd upon its formation and later served with the 343rd Kokutai

the attack, a strong jet stream over the target prevented the B-29 bombers from accurately hitting the Musashino plant – only 24 aircraft actually bombed the primary target, with the remainder hitting port facilities and urban areas.

Weather again intervened three days later when B-29s returned to Musashino, the 302nd failing to intercept the bombers due to dense cloud cover. A third attack on the same target was mounted on 3 December, and this time 24 Raidens were amongst the 74 Japanese fighters that succeeded in engaging the B-29s over Choshi, the easternmost city in the Greater Tokyo Area. Effectively employing the high altitude combat tactics that had been drilled into them over the past nine months, the 302nd claimed six B-29s destroyed, three probables and eight damaged, of which three destroyed fell to Raiden pilots – XXI Bomber Command actually lost five bombers.

CPO Yoshio Nakamura performed a diving attack on a B-29 directly over Choshi and saw the bomber subsequently trailing smoke and flames. He also observed aircrew parachuting from the aircraft. Future ace Lt(jg) Yozo Tsuboi also dispatched a B-29 with a similar diving attack, while recently promoted CPO Takumi Sugitaki joined several other IJNAF fighters in an attack on a lone bomber over Chiba Prefecture. Deciding to attack the B-29 head-on, he opened fire as the two aircraft closed on each other at high speed. His cannon rounds hit the wing root, splitting open a fuel tank that then erupted in flames. Moments later the bomber exploded into three sections, before plummeting to the ground. Sugitaki then pursued a second B-29 for too long, running out of fuel and being forced to ditch – he was quickly rescued.

Four Raidens from the Yokosuka Kokutai also participated in this engagement, the fighters being flown by veteran pilots. Only WO Yuzaburo Toguchi made a claim, however, being credited with damaging a B-29.

JAAF fighter units that intercepted the 3 December raid claimed seven destroyed and four probables. Four of the victories had reportedly come from ramming attacks, which shocked Ens Akamatsu to such an extent that he made a concerted effort to persuade the younger pilots in the 302nd not to emulate their JAAF counterparts.

A number of promising Raiden pilots from the 302nd were transferred to the newly formed 343rd Kokutai in late 1944, the latter unit being established to fly the new N1K1 Shiden and N1K2-J Shiden-Kai fighters. It was manned in the main by naval aviators handpicked by unit CO, Capt Minoru Genda (one of the masterminds behind the Pearl Harbor attack). The loss of aces CPO Yoshio Nakamura and Ens Chitoshi Isozaki, in particular, was keenly felt by the 302nd. Indeed, although the nightfighter-equipped 2nd Hikotai would steadily claim victories throughout late December 1944 and into the new year, the J2M-equipped 1st Hikotai, shorn of its best pilots, failed to engage B-29s again until the Musashino plant raid on 9 January. The 302nd sent aloft 24 Raidens, seven Zero-sens and a mixed force of 20 nightfighters, which attacked the bombers near Choshi. For some reason the B-29s were flying at a lower altitude than normal – typically, they would fly over the home islands at more than 30,000 ft – which meant that the J2M pilots could employ ‘dive and zoom’ attacks against them, damaging ten bombers.

Although the nightfighter crews of 2nd Hikotai continued to claim victories for the 302nd Kokutai during five nocturnal raids in the early weeks of 1945, 1st Hikotai had to wait until 10 February before it could claim another kill. Targeting Nakajima's Ohta aircraft plant for the first time, XXI Bomber Command dispatched 84 B-29s on the raid. In response, the 302nd Kokutai scrambled 35 Raidens that intercepted the bombers off Choshi. 1st Buntai leader Lt Junro Teramura, flying a J2M3 fitted with an oblique-firing 20 mm cannon, managed to hit a B-29 in one of its engines with rounds from the angled weapon. He then attacked the bomber with his wing guns, exhausting his ammunition as he sent the aeroplane down.

Lt(jg) Tsuboi claimed his second Superfortress victory two days later when four Raidens intercepted a lone F-13 on a reconnaissance mission. He would again be amongst the victors on 16 February, when carrier-based US Navy aircraft from Task Force (TF) 58 attacked military targets in the Kanto Plain area of central Honsho. These strikes were generated as part of the build-up to the amphibious landings on Iwo Jima, which took place three days later. All the IJNAF fighter units located in the Kanto area were engaged throughout the morning and afternoon, including the 302nd Kokutai, which sent 19 Raidens flown by novice pilots north (along with its vulnerable J1N1, D4Y2 and P1Y2-S nightfighters) to avoid them being strafed on the ground at Atsugi. The remaining 18 Raidens and 30 Zero-sens duly engaged carrier aircraft from 0715 hrs through to 1745 hrs.

During the course of two missions Lt(jg) Tsuboi claimed two F6F Hellcats destroyed over Tone, the second of these successes being shared with LA Masaji Harukawa. Overall, the 302nd claimed eight F6Fs destroyed and one probable for the loss of two Zero-sens. Three Raidens were also badly damaged. Tsuboi again claimed two Hellcats destroyed the following day, and these proved to be the only victories credited to a Raiden pilot from the unit on 17 February. Seven F6F kills and one probable were claimed by Zero-sen pilots from the 302nd Kokutai, however, including four by Ens Sadaaki Akamatsu – two A6Ms were lost in return.

TF 58 aircraft again attacked targets in the Kanto Plain on 25 February, although frequent snow showers and low cloud prevented most IJNAF fighters from taking off in opposition to the raid. Some 15 Raidens and nine Zero-sens scrambled from Atsugi, and a handful of F6Fs were engaged. The returning pilots could claim only two damaged, for no losses.

From late February XXI Bomber Command commenced a campaign of night raids with incendiaries, this form of attack being championed by the new commander of the B-29 force, Maj Gen Curtis LeMay. No fewer than 67 Japanese cities would be subjected to such attacks, with bombers typically flying in streams over their targets at between 5000-9000 ft. Although the 302nd Kokutai's nightfighter-equipped 2nd Hikotai and newly formed 3rd Hikotai would regularly sortie against the nocturnal raiders, the Raidens and Zero-sens of 1st Hikotai had no chance of intercepting the bombers. Indeed, it was not until 20 March that J2M pilots from the unit got to fire their guns in anger again when a pair of aeroplanes pursued a lone F-13A. On this occasion, not only did the Superfortress succeed in escaping its pursuers, a gunner from the aeroplane managed to shoot one of the Raidens down.



Former floatplane fighter pilot Lt(jg) Yozo Tsuboi was the only Raiden ace, claiming all 5.5 of his victories in the aeroplane with the 302nd Kokutai between 3 December 1944 and 17 February 1945. He was killed by return fire from an F-13A on 1 April

On 1 April the 302nd Kokutai had 26 J2Ms serviceable and 23 undergoing repairs. That same day three Raidens were scrambled to intercept yet another lone F-13A, and again the unit failed to shoot the aeroplane down and lost a fighter to its defensive fire. Moreover, the pilot killed in this engagement was none other than Lt(jg) Yozo Tsuboi, the IJNAF's only Raiden ace. Hit in the chest by return fire from the Superfortress, he crashed to his death in his J2M3. A graduate of the Naval Reserve Aviation Group's 9th Class in January 1943, Tsuboi initially served with the A6M2-N-equipped 934th Kokutai in the Dutch East Indies. He saw limited action in floatplane fighters, flying a number of missions in the Kyofu in early 1944 prior to joining the 302nd Kokutai.

The unit enjoyed better success against yet another lone F-13A on 2 April when veteran fighter pilot CPO Shigeji Kawai (the senior NCO in the kokutai) led his wingman in an attack on the reconnaissance aeroplane at 20,000 ft over the Miura Peninsula. Both pilots attacked from the front and beneath the F-13A, before wheeling around and making second passes that exhausted their ammunition. Returning to Atsugi shortly thereafter, Kawai and his wingman were informed during their subsequent debriefing that the Superfortress had indeed crashed. The following day three Raidens could only damage an F-13A photographing targets on the Kanto Plain.

On 7 April, in an alarming development for Japanese fighter pilots attempting to intercept B-29 formations during the hours of daylight, the first P-51D Mustangs were encountered over the home islands. The 15th and 21st Fighter Groups had quickly commenced operations from the newly captured airfields on Iwo Jima, initially performing close air support missions for the US Marine Corps on the island itself, before eventually switching to long range escort. No fewer than 108 Mustangs had been sent aloft on the 7th, escorting 107 B-29s of the 73rd BW sent to attack Nakajima's Musashino plant yet again.

Unaware of the Mustangs' presence, the IJNAF scrambled all of its available fighters – including its J1N1s, D4Y2s and P1Y2-Ss. The latter proved to be easy targets for the P-51 pilots. Of the 54 fighters scrambled by the 302nd Kokutai, 23 of them were Raidens. The Japanese fighters had little problem reaching the B-29s as they approached at just 15,000 ft, although they were soon engaged by P-51s. The J2M pilots had initially thought that the latter machines were in fact JAAF Ki-61 Hiens, the USAAF pilots proving to be anything but friendly as they proceeded to shoot down three J1N1s, one D4Y2 and a J2M3. A solitary B-29 was claimed as destroyed in return, with seven more damaged.

More P-51s were encountered on 12 April when the 73rd BW again targeted the Musashino plant, the IJNAF and JAAF losing 17 fighters between them – the 302nd Kokutai had six Raidens damaged, and claimed one B-29 probable and one damaged in return. One week later, 104 P-51s from the 15th and 21st FGs targeted Atsugi in a dedicated fighter sweep that saw the Mustang pilots claim 14 aircraft destroyed on the ground, with a further 53 damaged – only two Raidens were in fact destroyed. While the 21st FG strafed the airfield, the 15th FG provided top cover.

And it was the latter group that tangled with the 19 J2Ms and ten A6Ms that succeeded in getting airborne during the raid. Lt(jg) Sadaaki Akamatsu led a formation of four Raidens south over Sagami River, where

they spotted a formation of 20 Mustangs. He and his wingman targeted one of the USAAF fighters, the latter closing in for the kill when he was told to break off the attack by Akamatsu after a second Mustang was spotted on the tail of the pursuing Raiden. Although both the veteran ace and his wingman survived this encounter unscathed, three J2Ms were shot down and a fourth example badly damaged. Capt F H 'Herb' Henderson of the 15th FG's 45th Fighter Squadron (FS) was involved in the destruction of two of the Raidens, as he subsequently recalled in his post-mission combat report;

'I was the leader of a flight that also consisted of John Kester, Don Statsmann and a fourth pilot who may have aborted on takeoff. We were ready to return to Iwo Jima when I spotted two J2M "Jacks" [the Allied codename for the Raiden] headed toward the mainland. We gave chase, and the three of us took shots at the trailing "Jack". I made a pass on him, scoring hits, but had to break off because I overran him. Kester was next to score hits, but he too overran and had to break off. Statsmann finally finished him off. The "Jack" literally started coming apart and spun into the water. We split the credit three ways.

'I still had the lead "Jack" in sight, and went after him. When I got in range I began spraying him. He headed for the deck, making violent turns right and left. I managed to catch him in a steep turn to the right and got fatal hits on him. My gun camera confirmed the kill. We were over land by that time.'

At least two Mustangs were lost during the mission, and although the USAAF stated that they were downed by flak, Lt(jg) Akamatsu may have actually played a part in the demise of these aircraft. The self-proclaimed 'King of Aces', who had earned a notorious reputation as an undisciplined rebel and womaniser, was widely respected by his subordinates for his fighting abilities – and these came to the fore on 19 April. Although many of his contemporaries openly despised the Raiden because of its lack of manoeuvrability, stating that it could not survive against a Hellcat or a Mustang in a dogfight, Akamatsu was not intimidated by the American fighters now appearing in the skies over Japan. 'Our dogfighting techniques were superior to any other country's, but the Americans' shooting average was better than ours', Akamatsu stated after the war.

As if to prove his point, in an astonishing display of aerobatics and raw courage Akamatsu showed that the Raiden could indeed defeat a Mustang with the aid of a height advantage. Attacking from above, the 34-year-old veteran ace claimed that he forced two P-51s into a low altitude engagement that saw him shoot both fighters down.

From 17 April XXI Bomber Command targeted 18 JAAF and IJNAF airfields on the home island of Kyushu, from where Japanese kamikaze aircraft had been launching attacks – using the codename Kikusui (Floating Chrysanthemum) – on US Navy vessels involved in the amphibious



The self-proclaimed 'King of Aces', 34-year-old Ens Sadaaki Akamatsu had been a pilot in the IJNAF since 1932. With 11 victories to his name following the campaign in China, he then experienced plenty of action flying Zero-sens in the Philippines, the Dutch East Indies and during the attack on Calcutta. 'Outrageously temperamental, eccentric and quite violent', Akamatsu would be a stalwart within the 302nd through to war's end

The 302nd Kokutai moved from Kisarazu to Atsugi, 20 miles northwest of Yokosuka, in late May 1944 after the 301st Kokutai vacated the airfield for Truk. The unit inherited a number of Raidens that had been left behind, thus at last giving the kokutai its stated operational strength of 48 J2Ms on 1 July





Former floatplane pilot Lt(jg) Susumu Itoh quickly took to flying fighters upon being transferred to the 302nd as a buntai leader. He would subsequently participate in all the bomber interception missions flown by the kokutai as part of the 'Tornado unit', which had grouped all serviceable Raidens together at Kanoya in an effort to defend Kyushu from B-29 raids following the invasion of Okinawa on 1 April 1945. Itoh would claim two B-29s destroyed and three damaged during this period of intense action

landings on Okinawa that had commenced on 1 April. In an effort to blunt these raids, 19 Raidens from the 302nd Kokutai, led by Lt Susumu Itoh, were sent to Kanoya, along with 17 J2Ms from the 332nd Kokutai and seven from the 352nd Kokutai. Assigned to the 5th Air Fleet, the J2M pilots, who dubbed this combined kokutai the 'Tornado unit', relied on ground control radar when it came to intercepting incoming raids. The director of operations at Kanoya was the CO of the 302nd Kokutai's 1st Hikotai, now Lt Cdr Kushichiro Yamada.

The 302nd engaged B-29s for the first time from Kanoya during the morning of 27 April when Lt Itoh led 17 Raidens from all three kokutai aloft to intercept 21 bombers targeting three airfields. The IJNAF pilots duly claimed one Superfortress destroyed, two probables and two damaged, with two Raidens being damaged in return. The 302nd Kokutai was credited with the two B-29s that were damaged, one of these being claimed by Lt(jg) Norio Ueno. He then damaged his Raiden when he had to force-land the fighter. A second J2M was also damaged when Lt(jg) Sheijo Katami's fighter was hit by return fire from a B-29 and he too had to force land. Lt(jg) Hiroshi Tsuchida and CPO Shigeji Kawai were both credited with damaging the same B-29.

Lt Itoh would participate in all the bomber interception missions flown by the unit from Kanoya, claiming two B-29s destroyed and three damaged during this period of intense action. A veteran of early clashes with Superfortresses over Tokyo in November 1944, he explained to the author many years later that initial clashes with the heavy bombers over the Japanese capital usually took place at altitudes exceeding 33,000 ft. Itoh noted that intercepting the aircraft at such heights was very difficult, with pilots commenting after such missions that they felt as if the B-29s 'popped up out of nowhere' due to the limited field of vision from the Raiden's cockpit. This in turn meant that there was no time to perform pre-rehearsed attacks on the bombers, pilots instead having to make fleeting high speed passes at the B-29s. Follow-up attacks could only be made by those naval aviators who managed to pursue bombers as far as Choshi, on the eastern tip of the Kanto Plain. Typically, it would take two or three passes to bring a Superfortress down, hence the low number of kills credited to the 302nd Kokutai during this period.

B-29 raids on airfields on Kyushu were usually flown at altitudes below 16,600 ft, which meant Raiden pilots could position themselves ahead of the bombers so as to attack them head-on in a single pass from above. These formations were considerably smaller (between ten and twenty aircraft only) than the raids that had targeted Tokyo five months earlier, Superfortresses attacking in shallow dives in order to maximise their speed over the airfields they were bombing. Again, the only Raiden pilots to enjoy success were those that pursued the B-29s as they departed Kyushu and headed south back to Iwo Jima.

On 28 April Lt Itoh led a mixed group of Raidens aloft to intercept a morning raid by 80 B-29s on various airfields. Although the 302nd again failed to down a single bomber, WO Takehiko Baba and PO1c Hitoshi Sasazawa each claimed one probable and one damaged. Lt Itoh, CPO Shigeji Kawai, PO1c Tadashi Kaneda and LAs Takeshi Ohki and Shoji Kuroda also made damaged claims. The following day 60 B-29s targeted

Kanoya airfield during a morning attack that was opposed by 13 Raidens, with Lt Itoh again in the vanguard. LA Shigeo Sakata succeeded in downing two B-29s during a fiercely fought engagement in defence of the 302nd's airfield, although he was shot down and killed shortly after claiming his second victory. LA Shoji Kuroda was also credited with the destruction of a Superfortress after diving on it from above. A further six B-29s were damaged by WO Takehiko Baba, CPO Shigeji Kawai and Lt(jg) Norio Ueno, who subsequently had to bail out of his stricken Raiden. Finally, PO1c Hitoshi Sasazawa was also in the thick of the action, damaging three bombers before his fighter was hit and he had to force-land his badly damaged J2M.

Despite these valiant efforts, Itoh and his fellow pilots could not stop the B-29s from destroying two Raidens on the ground and badly damaging two others.

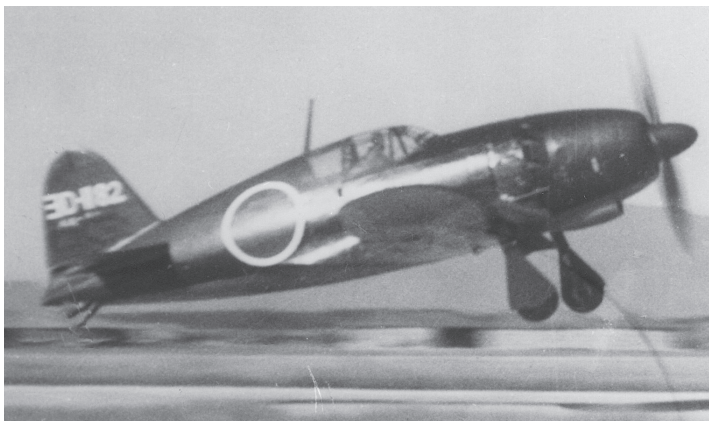
Lt(jg) Noriyasu Satoh led a mixed kokutai formation of 11 Raidens against ten B-29s on 30 April, and he and PO1c Tadeshi Kaneda and PO2c Minoru Ohmine each claimed a bomber damaged. Twenty Raidens, again led by Lt Itoh, intercepted two groups of B-29s on 3 May, with eight bombers being claimed as damaged by Lt(jg) Hiroshi Tsukada (three shared), WOs Baba (two) and Kawai and PO1c Ohmine. After several days of no action, or the interception of friendly aircraft, 14 Raidens scrambled during the morning of 7 May to engage 20 B-29s that had been detected on radar. Four bombers were damaged by 302nd Kokutai pilots, shared between Lt Itoh, Lt(jg) Tsukada, PO1c Ohmine, WO Kawai and CPO Yamakawa. The final clash between Raidens and B-29s over Kanoya took place on 10 May when 12 aircraft from all three kokutai were led into the air by Lt Itoh. Again, the IJNAF pilots failed to down any of their foes, with Lt(jg) Tsukada and Kawai only managing to damage three aircraft between them.

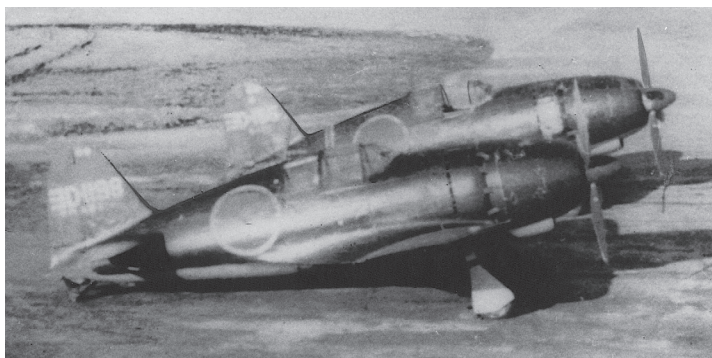
After this engagement just eight Raidens remained serviceable at Kanoya, with a further 17 undergoing repairs. On 16 May the 302nd returned to Atsugi, where it came under the control of the 3rd Air Fleet.

The kokutai's next encounter with the enemy came on 29 May when three Raidens and eight Zero-sens were amongst the IJNAF fighters that intercepted 454 B-29s heading for nearby Yokohama in the first strike of any kind against the port city on Tokyo Bay. The bombers were escorted by 101 Mustangs from the 15th and 21st FGs. In what would prove to be the most successful day of aerial combat for the very long range P-51 units in World War 2, the USAAF fighter pilots were credited with 28 victories for the loss of three Mustangs and one pilot.

The Japanese fighters engaged the enemy formation just east of Mt Fuji, P-51s clashing with IJNAF aircraft all around the B-29s. Future 11-kill ace Capt R W 'Todd' Moore, commanding the 45th FS flight covering the lead section of bombers, spotted three

With an incoming B-29 raid detected, a J2M3 from the 302nd Kokutai is scrambled from Atsugi. Operating a mixed force of Zero-sens and Raidens, the kokutai was one of the main IJNAF units that tried to defend Tokyo. Designed to intercept bombers, the J2M was not a particularly manoeuvrable aircraft. This trait did not sit well with most pilots, many of whom had spent their entire lives flying the nimble Zero-sen. They also disliked the Raiden's heavy controls and excessive landing speed





Two J2M3s sit on the flightline at Atsugi between sorties. Both aircraft have been adorned with yellow chrysanthemums on their fin tips to denote aerial victories claimed by pilots flying them. It would appear that the 302nd Kokutai was the only Raiden unit to mark its fighters in such a way. Note also that the J2M3 furthest from the camera has had a yellow flight leader's stripe applied to its rear fuselage

from a range of 300 yards that sent it crashing to the ground.

Moore's first victim was Lt Junro Teramura, who was attacked while in the process of pursuing four more P-51s. Bailing out of his blazing Raiden, Teramura spent a month in hospital recovering from burns. Two more J2Ms and two Zero-sens were also gunned down by Mustangs, although Akamatsu, at the controls of an A6M7, claimed two P-51s destroyed in return – the only loss admitted by the USAAF was 2nd Lt Rufus S Moore (Capt 'Todd' Moore's wingman no less), who fell to a lone Zero-sen.

Two more J2Ms from the 302nd were destroyed by Mustangs – this time from the 458th FS/506th FG – during the 23 June attack on the IJNAF training airfield at Hyakurigahara, Lt Norio Ueno and CPO Katsuji Kobayashi both taking to their parachutes. Confusingly, according to the mission report created by the 458th after this operation, its pilots claimed four Raidens destroyed;

"Red" and "Green" flights were heading about 270 degrees northwest of the Inubosaki lighthouse when four "Jacks" in box-four formation were called in at "ten o'clock low". The enemy aircraft were outnumbered and immediately dived for cloud cover. They did not reach it. "Red 1", Capt J B Baker, ran a burst into the tail of the fourth enemy aircraft, which chandelled tightly, caught Baker's second burst fairly in the cockpit and centre section and began to burn. 1Lt Vance Middaugh, "Red 3", shot and smoked the No 3 "Jack", which began to trail a small fire from its engine. 1Lt Norman Dostal saw the aircraft hit the ground and explode.

'1Lt Max Ruble, leading "Green Flight", crossed from the inside of the attack over "Red Flight" and put a burst into the belly of the second enemy aircraft, which broke right. Ruble pulled through to a 20-30 degree deflection, fired and set the "Jack" alight. The pilot jettisoned his canopy and rolled onto the wing while his aeroplane was still taking strikes. As Ruble ceased firing, the pilot opened his parachute. 1Lt Wilhelm Peterson, flying on Ruble's left wing, was unable to dodge and chopped the 'chute to bits with his propeller.

"Green 3", 1Lt Frank Wheeler, crossed with his leader and opened fire on the flight leader. The "Jack" caught fire and the pilot bailed out. 1Lt G B Lambert, forced out of position by the last crossover, swung wide to the right. When he turned back he suddenly saw a "Jack" sitting ahead of him. He followed the enemy aircraft up to 1000-2000 ft, firing, and saw strikes and drew smoke. When last seen, the "Jack" was still smoking and in a split-S at about 1000 ft.'

J2Ms as 'ten o'clock high' and gave chase – but not before instructing his second element to attack the No 3 Raiden while he went after the leader. Moore fired a deflection shot into the lead aeroplane and saw immediate hits, followed by the pilot bailing out. The No 2 Raiden peeled off into a steep dive, and Moore followed. His Mustang quickly overtook the Japanese fighter, and he fired a telling burst



On a more positive note, Lt(jg) Akamatsu and CPO Toru Saijo claimed a Mustang destroyed between them, although the 506th FG recorded no losses that day. Promoted to replace Lt Itoh as leader of 1st Hikotai's 2nd Buntai shortly thereafter, Akamatsu and ten other pilots from the 302nd Kokutai were subsequently transferred to the recently formed 312th Kokutai. This unit was to be equipped with the Mitsubishi J8M Shusui rocket fighter, closely based on the Messerschmitt Me 163, but the unit was still in training with gliders and Zero-sens when the war ended.

The 302nd Kokutai fought its very last action just two hours before Japan announced its surrender at noon on 15 August 1945. Four Raidens and eight Zero-sens took off from Atsugi to engage 250 US Navy carrier aircraft sent to attack targets on the Kanto Plain. In what proved to be the final major dogfight between IJNAF fighters and Hellcats, the 302nd aeroplanes (led by 2nd Hikotai CO and soon-to-be ace Lt Yutaka Morioka) bounced six F6F-5s from VF-88 as they strafed Atsugi. Although four of the Grumman fighters failed to return to USS *Yorktown* (CV-10) after this mission, the 302nd lost two Raidens and a Zero-sen in the action. The only confirmed success went to Morioka in a Zero-sen, giving him ace status. This final action by the 302nd Kokutai proved to be the last time the J2M saw combat.

332nd KOKUTAI IN HOMELAND DEFENCE

The second homeland defence unit issued with Raidens was the 332nd Kokutai, which formed on 1 August 1944 from the Kure Kokutai at Iwakuni, in the Yamaguchi Prefecture. Like the 302nd, it was initially equipped with 48 interceptors and 12 (J1N1) nightfighters. Of the former, 46 were Zero-sens and just two were J2Ms (and both of these were unserviceable). Two pilots from the Kure Kokutai had received Raiden training at Atsugi in early July, and they had then flown back to Iwakuni in the two examples of the aircraft at the airfield.

The CO of the 332nd was veteran naval aviator Capt Takeo Shibata, who would lead the kokutai into 1945. The fighter hikotai was led by Lt Cdr Yoshio Kuragane, who was so unimpressed by the Raiden that he rarely flew the aircraft. Indeed, he left the training of pilots new to the J2M to his subordinate, Lt Cdr Masao Yamashita. Fortunately, the latter proved to be very effective in this role when instructing the many inexperienced NCOs posted to the kokutai during the autumn of 1944. The 332nd also welcomed a trio of combat veterans in the form of WOs Susumu Ishihara and Fukuju Kawakami and CPO Tsunesaku Hayashi. Having seen action with the Tainan Kokutai over the Philippines and the Dutch East Indies in 1941-42, Ishihara 'made ace' with the 204th Kokutai over Rabaul in

At least five J2M3s in various states of disrepair can be seen in this photograph of IJNAF fighters, bombers and trainers found at Atsugi by the USAAF upon its occupation of the airfield in September 1945. All of the Raidens were formerly assigned to the 302nd Kokutai (via *Ronnie Olsthoorn*)

Amongst the combat veterans posted to the 332nd upon its formation in August 1944 were 16-victory ace WO Susumu Ishihara (left) and CPO Tsunesaku Hayashi. Although both pilots flew numerous bomber interception missions with the unit through to war's end, they only succeeded in damaging several B-29s between them – proof of just how hard it was to shoot a Superfortress down





On 22 December 1944 CPO Akeshi Ochi, a veteran of combat over Rabaul and Iwo Jima, succeeded in shooting down one of three Superfortresses lost by XXI Bomber Command that day. Although a malfunctioning undercarriage upon his return to Naruo left Ochi with no choice but to force-land his J2M3 ('32-101'), he was subsequently presented with a bottle of whisky by the 332nd Kokutai's executive officer, Lt Cdr Yoshio Yamashita, for claiming the unit's first aerial victory

Raiden force had increased to 15 aircraft, and five days later it sent 20 A6M5s to Clark Field to help with the defence of the Philippines – the unit was annihilated in just 20 days, however.

As previously noted in this chapter, 1 November was also the date that the first Superfortress had appeared over Tokyo, when an F-13 reconnaissance aircraft overflew the Japanese capital. Realising that its future opponents would be high-flying bombers rather than single-engined fighters, the Raiden pilots of the 332nd quickly changed their training syllabus. In mid-December F-13s started regularly appearing over Osaka and Kobe, and the IJNAF responded by sending 11 J2Ms and nine A6Ms of the 332nd Kokutai to Naruo – a hastily prepared landing strip converted from an old horse racing track – on 18 December.

Four days later the kokutai at last saw combat with its Raidens when nine examples, along with eight Zero-sens, intercepted B-29s targeting the Mitsubishi aircraft plant in Nagoya. CPO Akeshi Ochi, a veteran of combat over Rabaul and Iwo Jima, succeeded in shooting down one of three Superfortresses lost by XXI Bomber Command that day. Although a malfunctioning undercarriage upon his return to Naruo left Ochi with no choice but to force-land his J2M, he was subsequently presented with a bottle of whisky by Lt Cdr Yamashita for his success.

Following several unsuccessful attempts to engage B-29s early in the new year, the 332nd's Raidens finally managed to intercept bombers attacking the Kawasaki aircraft plant at Akashi on 19 January 1945. Seven J2Ms and five A6Ms dove on the B-29s in line astern formation, observers on the ground reporting that the sheer volume of tracer fired by the gunners in the Superfortresses 'was so thick that the fighters looked like doves flying over a red carpet'. Pressing home their attacks, Raiden pilots Lt Yoshio Saitoh, Lt(jg) Zenzaburo Aizawa and CPOs Saichi Matsumoto and Akeshi Ochi each claimed a bomber damaged, whilst Ens Kiyomi Kuwabara damaged two.

On 4 February 110 B-29s in three groups bombed Kobe and Matsuzaka. Again, the 332nd was in the vanguard of the defence, and this time two Superfortresses went down. The identities of the pilots who achieved these successes went unrecorded, however. Four days later, Lt Kohei Nakajima intercepted 54 B-29s that were targeting the Mitsubishi engine plant in Hamamatsu. Chasing his quarry west over Ise Bay, he eventually succeeded in shooting the aeroplane down.

February also saw Capt Takeo Shibata replaced as CO of the 332nd by Cdr Katsutoshi Yagi, who had led the 301st Kokutai upon its formation with Raidens in November 1943. Having subsequently seen bitter combat in command of the 221st Kokutai in the Philippines, Yagi was not only a staunch proponent of the J2M but also a strict disciplinarian. Indeed, he

late 1943 – he claimed three B-26s destroyed on 18 October and three more bombers on 2 November. Transferred to the 202nd Kokutai the following month, Ishihara was credited with four shared kills on 18 June 1944 off Saipan.

By 1 November the 332nd's

frequently reprimanded his pilots when they disobeyed regulations, and transferred the much-loved Lt Cdr Yamashita out of the 332nd altogether when the latter instructed his pilots not to engage US Navy carrier aircraft that attacked Japan on 19 March. Yamashita had taken this drastic step because he felt that the naval aviators in the 332nd were not experienced enough to engage their US Navy counterparts in their F6F Hellcats and F4U Corsairs.

On 25 April, following raids by XXI Bomber Command B-29s on JAAF and IJNAF airfields on the home island of Kyushu (from where kamikaze aircraft had been launching attacks on US Navy vessels sailing off Okinawa), the 5th Air Fleet transferred Raidens from the 302nd, 332nd and 352nd Kokutai to Kanoya. The 332nd's force of 17 J2Ms was led by Lt Kohei Nakajima, who would claim the combined unit's first victory – and his second – on the morning of 27 April. Diving on the bomber, Nakajima made short work of the Superfortress. Almost emulating his success, CPOs Eigoro Saitoh and Akeshi Ochi caught two B-29s that were lagging behind the main formation and made several passes at them. Both pilots claimed probable victories.

A number of pilots from the 332nd were in action again on 28 April when a mixed Raiden formation of 27 aircraft engaged 80 B-29s targeting airfields in Kyushu. Although no bombers were brought down on this occasion, 11 B-29s were reportedly damaged by the J2M pilots – the 332nd's Lt(jg) Zenzaburo Aizawa, CPO Saichi Matsumoto, PO2c Masayuki Ohnaka and ace WO Susumu Ishihara (two) of the 332nd were amongst those to make claims.

On 29 April 13 Raidens intercepted 60 B-29s undertaking a morning raid, and although pilots from the 302nd Kokutai were credited with three bombers destroyed, the only pilot to make a claim from the 332nd was Lt(jg) Kanji Satoh with one damaged. The following day ten more Superfortresses were engaged by 11 Raidens, and again the mixed formation of J2M pilots failed to shoot any of those bombers down. Six were reportedly damaged, however, with 332nd pilots Lt(jg) Aizawa, CPO Akeshi Ochi and PO2c Masayuki Ohnaka claiming hits on two B-29s between them. Four more were damaged by Lt(jg) Satoh, Ens Susumu Ishihara and PO1c Kan-ichi Dehara on 7 May, although the latter pilot was in turn forced to bail out of his Raiden over the sea after it was hit by defensive fire from one of the B-29s. He was plucked from the water by a passing fishing boat, having first identified himself by speaking loudly in Japanese and showing the crew of the vessel the small hinomaru on his helmet.

The Kanoya-based Raidens intercepted B-29s for the last time on 10 May, when ten of the 12 pilots led aloft by Lt Itoh of the 302nd Kokutai claimed to have damaged five bombers. The 332nd's Lt(jg)s Aizawa and Kanji Satoh were the pilots credited with one damaged apiece. Six days later the kokutai flew its surviving J2Ms back to Naruo.

On 25 May control of the 332nd was assigned to the 72nd Air Flotilla, which was responsible for the aerial defence of western Japan. The unit was also boosted in strength when the 352nd Kokutai, led by Lt Toshiaki Okamoto, was ordered to transfer its remaining Raidens and pilots from Omura to the 332nd at Naruo.



Although the 332nd Kokutai's Naruo home, in Hyogo Prefecture, was bombed on many occasions during the final months of the conflict, the unit continued to operate from what had been a pre-war horse racing track through to the final surrender. Here, smoke billows from a blazing aeroplane following a recent attack, although the crudely camouflaged Raiden in the foreground appears to have survived the raid unscathed

The unit next saw action on 1 June when it sent four Raidens up to defend Osaka from attack by 458 B-29s. The bombers were expecting an escort of 148 P-51s, but only 27 managed to penetrate a storm front that blocked their path from Iwo Jima during what was subsequently dubbed the 'Black Friday' mission by those crews that participated in it. No fewer than 24 Mustang pilots perished when they crashed into the sea whilst trying to find a way through the storm.

Making the most of the limited USAAF fighter presence over the target area, Lt Tota Hayashi dove on an 11-aeroplane formation of B-29s he had spotted at 16,600 ft. Aiming at the lead bomber, he shot a third of its left wing off – the aeroplane subsequently fell away and spiralled down to its destruction. Zoom-climbing back up to 19,300 ft, Hayashi then attacked a nine-bomber formation again from above. Shooting out the far left engine of the lead aeroplane, Hayashi felt his own aircraft shudder as it was struck by return fire from the B-29. Banking around a large cumulonimbus cloud, he fired his remaining ammunition at the lead bomber in a 12-aeroplane formation. Having observed hits on its left inner engine, Hayashi was then forced to bail out of his now blazing Raiden – return fire from the second B-29 he attacked had split an oil line to the engine, which eventually burst into flames. The 332nd Kokutai also lost a second J2M on this mission when PO1c Masayuki Ohnaka was shot down by a P-51.

With fuel now becoming increasingly scarce, Raiden pilots rarely flew except when scrambled to meet incoming raids. And with these being heavily protected by fighter escorts, the chances of achieving success were even slimmer than they had been before. The last fighter-versus-fighter combat experienced by the 332nd came on 26 June, and it exclusively involved Zero-sens from the unit – two were shot down by Mustangs. Proving that the IJNAF's fighter assets were just as vulnerable to enemy attack when they remained on the ground, Naruo was bombed during the night of 5-6 August and ten Raidens and seven Zero-sens destroyed.

Reassigned to the 53rd Air Flotilla in early August, the 332nd Kokutai flew its final mission under IJNAF control shortly after dawn on 17 August, when, responding to reports that the US Navy's TF 58 was nearing Shikoku, Lt Tota Hayashi and CPO Akeshi Ochi (both B-29 'killers') took off in their Raidens to reconnoitre the area in search of the vessels. No sign of the carriers could be found, and Ochi was forced to land on a beach after the engine failed in his J2M. Hayashi also failed to make it back to base, ditching his fighter in the harbour at Awaji Shima when it ran out of fuel.

On 3 November, following the US occupation of Naruo, four unarmed J2M5 Model 33 aircraft hastily adorned with 'stars and bars' were escorted to Oppama by a lone Grumman TBF Avenger. Flown by Lts Tota Hayashi and Mitsumasa Watanabe and WOs Saichi Matsumoto and Eigoro Saitoh, the aircraft were subsequently evaluated at the airfield by the Allies.

352nd KOKUTAI IN HOMELAND DEFENCE

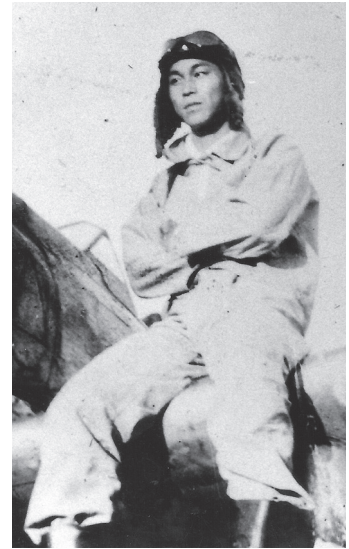
The final unit to be equipped with the Raiden in significant numbers was the 352nd Kokutai, which evolved from the Omura detachment of the Sasebo Kokutai. The latter unit had been formed to provide fighter defence for the naval base at Sasebo, in the Nagasaki Prefecture. The first two pilots from Omura to be checked out on the J2M were Lt Kunio Kanzaki and CPO Yasunobu Nabara, who each flew a fighter back to the airfield from Oppama after completing their training.

Shortly thereafter, on 10 August 1944 the Omura detachment became the 352nd Kokutai. Like other units created at this time, the kokutai was to be equipped with 48 interceptors and 12 nightfighters for the defence of Sasebo, Nagasaki and Omura. At the time of forming, it was equipped with 30 Zero-sens, four J1N1s and two unserviceable Raidens. Led by Capt Ryuji Terasaki, the 352nd had an inexperienced officer cadre. However, a handful of its warrant officers and NCOs had seen combat. These included WO Yoshimichi Saeki, who had fought in China and in the opening campaigns of World War 2 with the Tainan Kokutai, and CPO Toshiyuki Ichiki, a veteran of combat over the Solomon Islands in 1942-43 again with the Tainan Kokutai. Finally, recently promoted Ens Susumu Kawasaki had engaged Australian fighters whilst at the controls of an A6M2-N floatplane fighter during raids on Darwin in 1943.

By 1 September the 352nd was equipped with 43 Zero-sens, four J1N1s and 17 Raidens, but only four of the latter were serviceable. The kokutai had by then been split up into three hikotai, with each one equipped with a different fighter type. The J2M unit was led by Lt Naoshi Sugisaki.

The 352nd's ongoing mechanical problems with its Raidens meant that none were available on 20 August when the kokutai made its combat debut against 88 B-29s sent to bomb the Yahata ironworks from their bases in mainland China. Some 33 Zero-sens and four Gekkos first attacked the Superfortresses at an altitude of 23,300 ft, claiming three destroyed, two probables and two damaged. The Raiden hikotai would have to wait until the B-29 raid on Omura on 25 October to see action, eight J2Ms being amongst 71 fighters scrambled by the 352nd Kokutai and the Omura Kokutai. Engaging the bombers at 26,200 ft, the intercepting pilots were plagued by cannon failures and other technical malfunctions. The only Raiden pilot to make any claims was CPO Yasunobu Nabara, who was credited with two damaged – he reported that the first B-29 he attacked started belching out black smoke after his firing pass and the second bomber he targeted was last seen trailing white smoke. The 352nd, which claimed one bomber destroyed and seven damaged overall, suffered no losses in return, although one Raiden pilot had to deadstick land his fighter after it suffered an engine failure in flight.

The kokutai put up 53 fighters (including 11 Raidens) against a raid by 93 B-29s on Omura on 11 November, but almost ten-tenths cloud cover meant that only two pilots – both flying J2Ms – managed to fleetingly locate the bombers before they disappeared into the overcast once again. Conversely, only 29 Superfortresses managed to drop any ordnance. XX Bomber Command returned to Omura ten days later in an effort to make up for the weather-affected results of the raid on the 11th. The 96 B-29s dispatched on



At the time of its forming, the 352nd was equipped with 30 A6Ms, four J1N1s and two unserviceable J2Ms. Led by Capt Ryuji Terasaki, the 352nd had an inexperienced officer cadre. However, a handful of its warrant officers and NCOs had seen combat. These included WO Yoshimichi Saeki, seen here, who had fought in China and in the opening campaigns of World War 2 with the Tainan Kokutai



CPO Yasunobu Nabara was one of the first pilots assigned to the Omura detachment of the Sasebo Kokutai to be checked out in the Raiden. Shortly thereafter, on 10 August 1944, the Omura detachment became the 352nd Kokutai. He claimed two B-29s damaged whilst defending Omura from attack on 25 October – the first time the kokutai's Raidens had succeeded in intercepting the high-flying USAAF bombers

the mission were detected by Japanese Army units in China, and they in turn alerted the 352nd Kokutai early enough to allow it to scramble eight J1N1s, 16 Raidens and 33 Zero-sens – ten fighters from the Omura Kokutai were also sent aloft. With time on their side for once, the IJNAF pilots were able to climb above the approaching bomber formations (each consisting of seven to ten aeroplanes) closing on Omura at 25,000 ft.

Thanks to the B-29s attacking at a lower altitude than had previously been the case, the Raiden pilots in particular proved very effective. WO Toshiyuki Ichiki, leader of the 2nd buntai, claimed a bomber destroyed, as did PO2c Susumu Tsuchiya, who was the third man in the 3rd Buntai – he was also credited with damaging a second B-29. 4th buntai leader WO Yasunobu Nabara downed a third Superfortress, while two more were credited as damaged to other J2M pilots. The 352nd also suffered its first Raiden combat fatality during this fiercely fought engagement when PO2c Yukio Sawada of the 1st buntai was shot down. Zero-sen and Gekko pilots claimed a handful of victories too, taking the kokutai's overall tally to nine B-29s destroyed, ten probables and 21 damaged. Two A6Ms were destroyed and two more force-landed, as did two J1N1s. Two Zero-sen pilots were also killed, including Lt(jg) Mikihiro Sakamoto, who perished when he rammed a B-29. Finally, the Omura Kokutai added three more victories to the tally for the loss of one Zero-sen and five damaged.

Omura was targeted again on 19 December, although on this occasion only 36 B-29s were involved. The 352nd put up a mixed formation of 45 aeroplanes in response, including 11 Raidens, and the latter claimed two bombers damaged. A J2M subsequently force-landed and was badly damaged. The final raid on the home islands by China-based Superfortresses assigned to Operation *Matterhorn* was mounted on 6 January 1945 when 48 bombers headed for Omura once again. The 352nd Kokutai responded by scrambling 43 fighters, including 12 Raidens. The unit claimed two B-29s destroyed, eight probables and four damaged, although which aircraft and pilots were credited with what kills is not clear. What is known for certain is that Lt(jg) Koichi Sawada was shot down and killed, and a Zero-sen was lost too.

With XXI Bomber Command taking over the offensive against Japan from bases in the Marianas chain of islands, the 352nd's Raiden pilots would not experience further action until late March. This was just as well, for like the 302nd, it had lost a number of its best aviators to the newly formed 343rd Kokutai. In their place, the unit was sent inexperienced pilots who had only just completed their training.

The unit was also struggling with a lack of aircraft, the CO of the kokutai, Capt Bunzo Shibata, complaining to his superiors that of the 30 Raidens assigned to the 352nd in mid-March 1945, ten were J2M5s fitted with supercharged MK4U-4 Kasei Model 26a engines. This variant, as previously noted in this book, had been produced specifically to reach the high altitudes favoured by the B-29 formations attacking Japan. Unfortunately, the Kasei Model 26a engine proved to be prone to failure. Furthermore, flying a J2M5 at altitudes in excess of 35,000 ft took great skill, as did landing the fighter at mission-end, for its approach speed exceeded 138 mph. On a positive note, the J2M5 had an enlarged canopy that gave the pilot an improved view, a flatter forward fuselage section and

four faster-firing 20 mm Type 99 cannon in the wings. The 352nd had only one pilot that was cleared to fly the J2M5 operationally after the 343rd plundered its ranks, leading Capt Shibata to request replacement of these aircraft with J2M3s or A6M5cs. There are no records available to indicate how this problem was resolved.

The 352nd scrambled 30 fighters (including ten Raidens) to defend Omura on 18 March when no fewer than 940 naval aircraft from TF 58 attacked targets in Kyushu, although the airfield was not targeted on this occasion and the kokutai failed to engage the enemy. Omura was one of three sites bombed by B-29s on 27 March, however, TF 58 requesting that XXI Bomber Command knock out as many potential kamikaze aircraft as possible in Kyushu ahead of the invasion of Okinawa, scheduled for four days later. A total of 161 B-29s were involved, with two groups bombing Omura from a height of 16,650 ft.

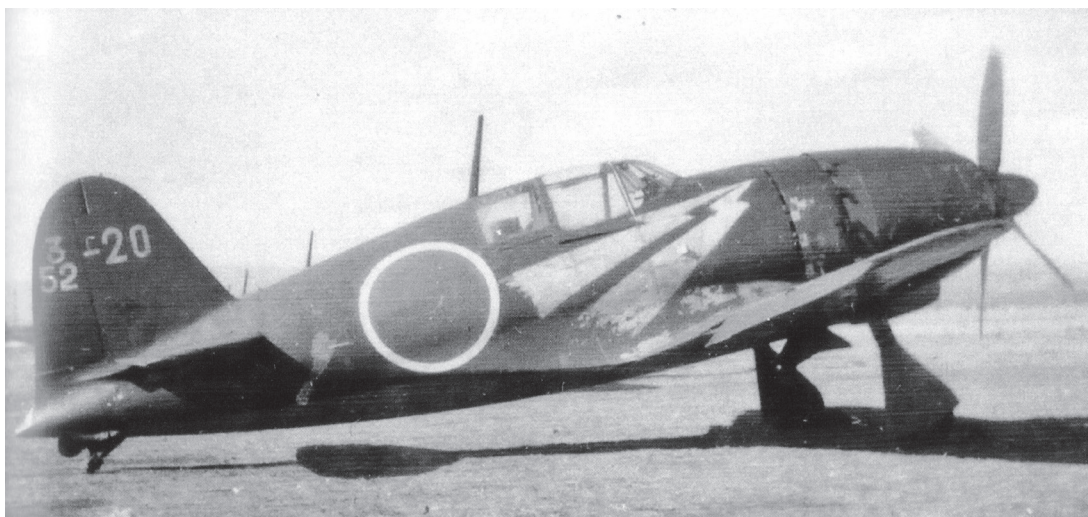
Eight Raidens were amongst the fighters sent into action by the 352nd, the pilots waiting for the B-29s at 30,000 ft. Visibility was poor that day, however, and only ten aircraft (including four Raidens) intercepted the bombers, damaging a solitary Superfortress. The airfield was attacked, nevertheless, and four Raidens and a two-seat A6M5-K trainer were destroyed on the ground. On 31 March 32 B-29s bombed Omura again, and this time two bombers were downed and nine damaged by the 352nd. How many, if any, of these claims were made by Raiden pilots is unclear.

Like the 302nd and 332nd Kokutai, the 352nd was ordered to send Raidens to Kanoya to defend southern Kyushu in late April, the unit dispatching all of its serviceable examples – just seven J2Ms – on the 26th of that month under the command of Lt(jg) Yoshihiro Aoki. Two days later Ens Noburo Kikuchi became the first pilot from the kokutai to make a claim from Kanoya when he was one of 12 naval aviators from the combined Raiden unit to damage a B-29. However, the 352nd's Ens Kiyotoshi Kaneko was forced to bail out after being badly wounded in the engagement and Lt(jg) Toshiaki Okamoto force-landed his shot-up J2M. Lt(jg) Sadao Yamamoto was the only pilot from the unit to damage a B-29 on 30 April, the combined Kanoya Raiden kokutai claiming six damaged in total without loss. Yamamoto was again the lone claimant from the 352nd on 3 May, his Superfortress being one of eight damaged by Raiden pilots. Two J2Ms were lost on this occasion, with Lt(jg) Isamu Nishida of the 352nd successfully taking to his parachute.

Four days later Ens Kikuchi made his second damaged claim while flying from Kanoya, his bomber being one of five hit by Raidens scrambled from the airfield. The final claim for the 352nd during this brief deployment



Lt(jg) Yoshihiro Aoki (second from left) briefs pilots in his division on an impending mission from Kanoya in early May 1945. He led seven Raidens to the airfield on 26 April, where they joined J2Ms from the 302nd and 332nd Kokutai as they attempted to defend bases in southern Kyushu that were being used by kamikaze aircraft in attacks on US Navy vessels supporting the invasion of Okinawa. Behind them is one of at least two J2M3s flown by the 352nd that had been adorned with distinctive 'thunderbolt' markings inspired by the fighter's name



An overall view of J2M3 '352-20', which was usually flown by Lt(jg) Yoshihiro Aoki during his time at Kanoya in the spring of 1945

Former Air Arsenal pilot WO Masao Sasakibara, who had earlier become an ace flying A6Ms from the carrier *Shokaku* during various battles in 1942-43, achieved a unique victory in the Raiden while assigned to the HQ flight of the 1001st Kokutai at Suzuka. He downed a B-29 from a formation that was targeting Nagoya, thus taking his tally of kills to 12. Although Sasakibara later served with the 343rd Kokutai, he failed to add to his tally



came on 10 May when Lt(jg) Okamoto was one of five J2M pilots to damage a B-29. The 302nd and 332nd departed to their home airfields shortly thereafter, although the 352nd did not return to Omura (with eight Raidens) until 3 June. By then the unit had come under the command of the 72nd Air Flotilla, and on 8 June its handful of aircraft and pilots – led by Lt(jg) Okamoto – were transferred to the 332nd Kokutai at Naruo. Shorn of its Raidens, the 352nd subsequently focused on nightfighter operations until war's end.

ONE-OFF SUCCESS

Former Air Arsenal pilot WO Masao Sasakibara, who had earlier become an ace flying A6Ms from the carrier *Shokaku* during various battles in the Pacific in 1942-43, achieved a unique victory in the Raiden while assigned to the HQ flight of the 1001st Kokutai at Suzuka. This unit was engaged in the transportation of replacement aircraft and parts to kokutai serving overseas. With Mitsubishi's nearby plant building J2Ms, Sasakibara, who had been heavily involved in the testing of the aeroplane at the Air Arsenal in 1943-44, routinely delivered Raidens to frontline kokutai.

A handful of veteran pilots scrambled in brand new J2Ms from Suzuka on several occasions to intercept B-29s targeting Nagoya in December 1944, including Sasakibara and Lt Fusaji Miyata. The latter, with 12 years of flying experience in the IJNAF, took off in a Raiden armed with a 3-go white phosphorous aerial bomb – a weapon that was sporadically used with limited success by the Japanese against bomber formations. Having reached a height of 33,000 ft above and ahead of an approaching formation of B-29s, Miyata pushed the release button for the weapon but the mechanism had frozen and the bomb refused to drop. However, Sasakibara, who was also participating in this mission, returned to Suzuka having claimed a Superfortress destroyed with cannon fire. This victory took his tally to 12 kills. Sasakibara would later serve with the 343rd Kokutai.



CHAPTER FOUR

N1K1-J SHIDEN IN COMBAT

With the Raiden proving to be a great disappointment to the IJNAF in frontline service, hopes were firmly pinned on Kawanishi's N1K1/2 family of interceptors developed from the Kyofu floatplane fighter. The first unit to receive examples of the N1K1-J Shiden was the 341st Kokutai, which had been specially formed at Matsuyama, in the Ehime Prefecture on the island of Shikoku, on 15 November 1943 to fly the aircraft. In a repeat of the problems that had afflicted the Raiden's service entry, the 341st (one of four kokutai created to fly the N1K1-J within the 1st Air Fleet, which was itself formed on 1 February 1944) had to make do with A6Ms until the first Shidens reached the unit in mid-February. By then the 341st was flying from Tateyama, in the Chiba Prefecture.

As previously noted, the Shiden was plagued by considerable teething troubles, including poor engine reliability and frequent undercarriage failure. With its wings mounted mid-fuselage, the N1K1-J had to rely on long undercarriage legs that routinely collapsed when the fighter was taxied over uneven ground. These problems, and the lack of aeroplanes in general, meant that the 341st only commenced formation fighting training with the aircraft in June.

By 10 July there were sufficient Shidens on strength to create Sento 401st Hikotai and Sento 402nd Hikotai, each of which was supposed to be equipped with 48 fighters. Sento 401st Hikotai was led by nine-victory

Pilots from the 341st Kokutai's Sento 401st Hikotai brave the snow at Tateyama for a group photograph in March 1944. The unit had only a handful of Shidens at this time due to myriad technical problems delaying the fighters' delivery from Kawanishi. The individual in the centre of the group not wearing flying gear is ace Lt Ayao Shirane, CO of Sento 401st Hikotai



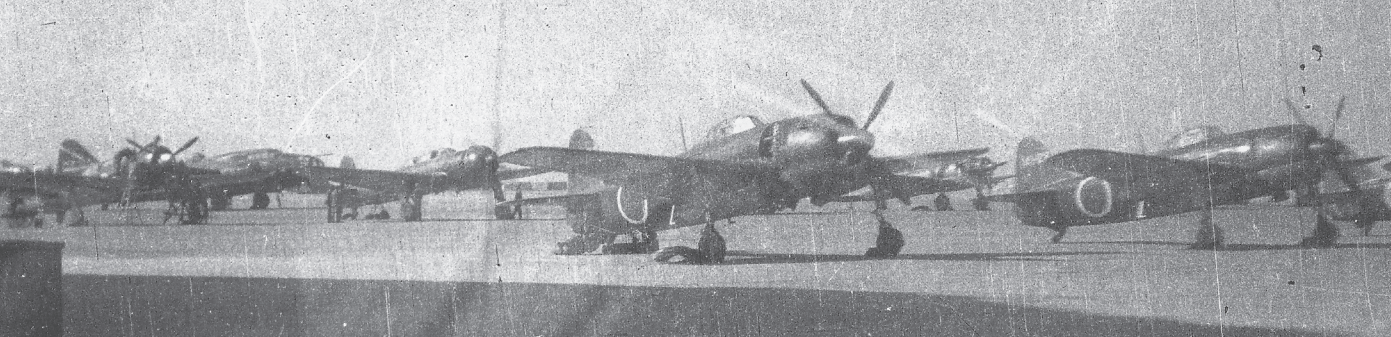
Sento 401st Hikotai pilot PO1c Takeo Yamada claimed four F6Fs destroyed when the Shiden made its combat debut during the defence of Formosa on 12 October 1944. Posted to the 343rd Kokutai's Sento 701st Hikotai in early 1945, Yamada was killed whilst dogfighting with USAAF P-47Ns on 28 May 1945

ace Lt Ayao Shirane, who had been in action since August 1940. A veteran of action over Midway, the Eastern Solomons and Santa Cruz, he had served as a buntai leader onboard the carriers *Akagi* and *Zuikaku*. Shirane's counterpart in Sento 402nd Hikotai was 13-victory ace Lt Iyozo Fujita, fresh from the doomed defence of Iwo Jima. He had flown Raidens with the 301st Kokutai before reverting to Zero-sens. The bulk of his pilots in the 402nd came from the recently disbanded 345th Kokutai, which had originally been formed as a Shiden unit but had had to make do with A6Ms when production of the Kawanishi fighter fell badly behind schedule.

10 July also saw the formation of Sento 701st Hikotai within the Yokosuka Kokutai, this somewhat nomadic Shiden-equipped unit later becoming part of the 341st Kokutai and, eventually, the 343rd Kokutai following its re-equipment with Shiden-Kais. The 701st was assigned to T Force shortly after its creation, this organisation being formed following lessons learned during the Battle of the Philippine Sea. Clearly, the IJNAF and JAAF could no longer hope to attack US Navy carrier task forces in set-piece engagements during daylight hours, so T Force was created to strike these vessels during the poor weather conditions associated with typhoons, or at night. G4M Rikkos, P1Y Gingas and JAAF heavy bombers were assigned to T Force, as were B6N Tenzan torpedo-bombers. Fighter protection was provided by Sento 701st Hikotai's Shidens and Zero-sens from Sento 303rd Hikotai.

On 31 August the 341st Kokutai sent 17 N1K1-Js from Sento 401st Hikotai to Takao in an effort to bolster Formosa's meagre aerial defences. This number had been boosted to 32 – plus 11 Zero-sens – by mid-September, although only 20 were serviceable. Sento 402nd Hikotai, meanwhile, was equipped with 30 Shidens (25 serviceable) and 22 Zero-sens at Miyazaki. The Takao-based N1K1-Js were supposed to defend Formosa from attack by USAAF aircraft flying from the Chinese mainland, but poor serviceability meant none were ever intercepted. Ironically, the Shiden would make its combat debut against carrier-based fighters of the US Navy when, on 12 October, F6F Hellcats from Third Fleet's TF 38 attacked targets on Formosa in a series of strikes that lasted ten days. Their aim was to prevent Japanese aircraft on the island from participating in the Battle of Leyte Gulf, scheduled to commence later that same month.

Initially, Zero-sens from the 221st Kokutai saw all of the action, with the Shidens being kept in reserve until seven were led aloft on patrol by Sento 401st Hikotai CO Lt Masaaki Asakawa (who had replaced Lt Shirane when he had been posted to Sento 701st Hikotai). Encountering a force of around 60 aircraft as they approached Takao, two of the Shiden pilots used their height advantage to claim eight F6Fs destroyed between them. Four were credited to PO1c Takeo Yamada, who eventually managed to extricate himself from the action and return to base. PO1c Hideo Hirakawa was not so fortunate, however, ramming a Hellcat after he had exhausted his ammunition downing three other F6Fs. Hirakawa, who would subsequently become the only Shiden ace, was saved by his parachute. A further 14 N1K1-Js had been hastily scrambled when Asakawa's formation engaged the Hellcats, and pilots from this second group claimed a further two aircraft destroyed. The ten victories credited to Sento 401st Hikotai



came at a high price, with 14 Shidens being lost in return. Amongst the pilots killed was Lt(jg) Shigemi Wakabayashi.

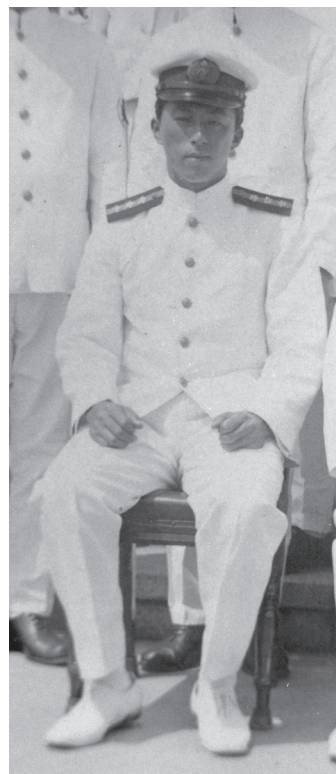
Just eight N1K1-Js remained serviceable on Formosa after this initial action, although this number had doubled by the time Sento 401st Hikotai sortied all of its available aircraft on 14 October as escorts for two strike forces of torpedo- and dive-bombers sent to attack TF 38. These formations met with little success, with six aircraft (including a Shiden) being shot down by F6Fs – five Hellcats were claimed in return. The following day N1K1-J numbers on Formosa were boosted by the arrival of Sento 402nd Hikotai and Sento 701st Hikotai.

On 20 October US forces landed on Leyte Island to signal the start of the retaking of the Philippines. Two days later, 40 Shidens from the 341st Kokutai (drawn from both of its sento hikotai) and Sento 701st Hikotai flew in to Marcott – part of the Clark Field complex – on Luzon. Only 21 were serviceable when the 2nd Air Fleet launched more than 300 aircraft in a strike on the Fast Carrier Task Force during the Battle of Leyte Gulf on 24 October. The IJNAF suffered heavy losses in the unsuccessful operation, with 11 Shidens being included within the 60 aircraft shot down. Amongst the N1K1-J pilots killed was WO Minoru Shibamura. Another aircraft from Sento 401st Hikotai, flown by Lt(jg) Masae Someya, was lost 24 hours later whilst searching for carriers off Legaspi. On 28 October six Shidens were part of a 19-strong escort for 24 bomb-laden Zero-sens sent to attack US forces in Tacloban, the Kawanishi pilots fighting off ten F6Fs and claiming one destroyed, one probable and a strafing victory without loss.

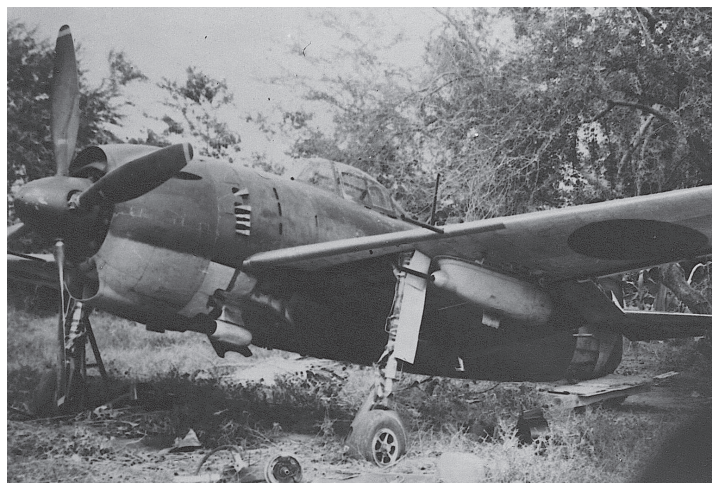
The following day carrier aircraft struck targets on Luzon, and 11 Shidens were scrambled to intercept the first wave of attackers. Six F6Fs and two SBDs were claimed to have been shot down for the loss of six N1K1-Js. Eight aircraft from the second wave were credited to Shiden and Zero-sen pilots that doggedly defended Marcott from attack, and a further two F6Fs were downed by Shiden pilots from the third wave.

By 31 October there were 25 N1K1-Js at Marcott, of which 15 were serviceable. This number took a hit on 5 November when carrier-based aircraft again targeted Luzon in three waves. Shiden pilots were credited with ten F6Fs, two SBDs and two unidentified aeroplanes destroyed, although seven N1K1-Js were lost in return. Eight days later three more F6Fs fell to the Shiden's guns, but six Kawanishi fighters were in turn shot down and six more destroyed on the ground. By this time Sento 701st Hikotai had been transferred from T Force to the 341st Kokutai, and on 24 November the unit's CO, Lt Ayao Shirane, was killed in combat over Ormoc with P-38s from the 433rd FS/475th FG. A nine-victory ace who had personally trained his pilots in the art of mastering the Shiden as a fighter, Shirane may well have added to his tally over the Philippines

Sento 401st Hikotai N1K1-Js sit on a packed ramp at Miyazaki, in southern Kyushu, en route to the Philippines in late October 1944. The Shidens would fly more than 300 sorties during the campaign, and none would make it back to Japan from the Philippines. G4M Rikkos, A6M Zero-sens and a lone B6N Tenzan can be seen parked behind the Shidens



A number of N1K1-Js were found abandoned in the Philippines after the campaign had ended in early January, with some examples, such as this aircraft, being virtually intact. At least one Shiden from the 341st Kokutai, found at Clark Field, was briefly test flown by the TAIU. It was damaged beyond repair on its first landing when the main gear collapsed



as records from the campaign are devoid of detail in respect to who downed what. One of his pilots from this period, ace Ens Akio Matsuba, claimed four Hellcats destroyed off Taiwan and over the Philippines.

Outnumbered whenever it ventured into the air and hamstrung by the unserviceability of its few remaining Shidens, the 341st was also forced to 'volunteer' six pilots for Tokko Special Attack Units that were mounting suicide missions against naval vessels off Leyte. The kokutai moved to Mabalacat airfield shortly thereafter, its trio of sento hikotai now being led in the air by ace Lt Iyozo Fujita following the death of Lt Shirane. During December at least seven Shiden pilots were killed during interceptions overhead Luzon, including PO1c Hideo Hirakawa on the 23rd. Attacking USAAF bombers over Manila, he perished when his Shiden collided with his target. This final victory took Hirakawa's tally to five, making him the only known Shiden ace.

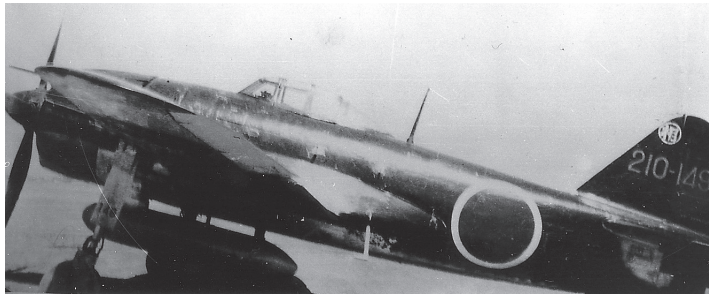
From mid-December the few surviving N1K1-Js were increasingly used as fast reconnaissance aircraft. Indeed, future 343rd Kokutai pilot Lt Takuo Mitsumoto frequently spotted US Navy carriers sailing off Luzon. On 2 January no fewer than 12 fully fuelled and armed Shidens were caught by P-47s at Mabalacat preparing to take off on a Tokko escort mission. All of the fighters were destroyed. The final four airworthy N1K1-Js were led by Lt Iwashita to Tuguegarao, in Cagayan province on 9 January, and they too were soon lost attacking shipping in the Lingayen Gulf. Although Lt Fujita and his remaining pilots were flown back to Formosa in IJNAF and JAAF transports, the groundcrews were left in Luzon to fight on to the death.

Between 24 October 1944 and 10 January 1945, Shidens had flown 303 sorties (compared to 1049 by A6Ms) in the Philippines. Between them, Shiden and Zero-sen pilots had claimed 120 American aircraft shot down and 60 destroyed on the ground. The vast majority of these had fallen to naval aviators flying A6Ms.

HOMELAND DEFENCE

The IJNAF received a further 112 Shidens during 1945, and they would be used in ever diminishing numbers by a handful of units in the ill-fated

LEFT By the time nine-victory ace Lt Ayao Shirane joined the newly formed 341st Kokutai in November 1943 he had been in action since August 1940. A veteran of action over Midway, the Eastern Solomons and Santa Cruz, he had served as a buntai leader onboard the carriers *Akagi* and *Zuikaku*. Subsequently posted to Shiden-equipped Sento 701st Hikotai, Shirane was killed in combat over Ormoc with P-38s from the 433rd FS/475th FG on 24 November 1944



The first unit to see action with the Shiden over Japan was the 210th Kokutai, which had been formed at Meiji, near Nagoya, as a composite training unit equipped with many different types of aircraft. Flying no fewer than 31 Shidens, the buntai assigned these fighters was led by Lt Kazumasa Mitsumori. When B-29s started attacking targets in Japan, the 210th's instructors responded by flying interception missions

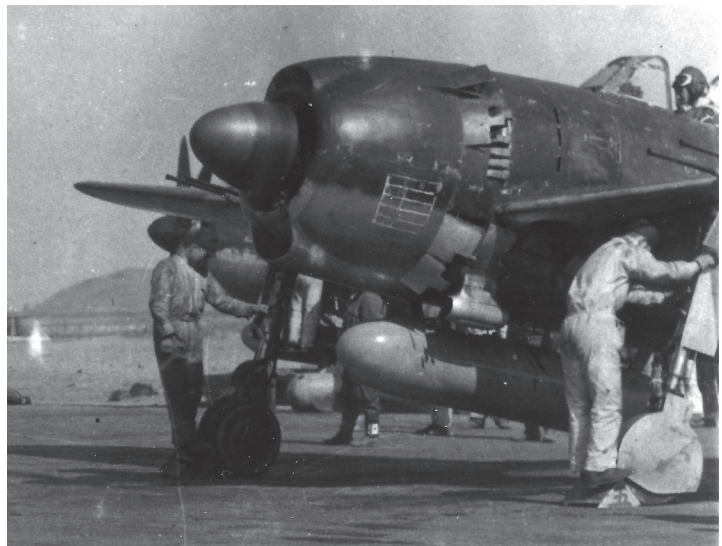
defence of the home islands. The first to see action with the Shiden over Japan was the 210th Kokutai, which had been formed at Meiji, near Nagoya, as a composite training unit equipped with many different types of aircraft. Flying no fewer than 31 Shidens, the buntai assigned these fighters was led by Lt Kazumasa Mitsumori. When B-29s started attacking targets in Japan, the 210th's instructors responded by flying interception missions. The first of these took place on 13 December when 14 Zero-sens, four Shidens and three J1N1s attacked B-29s over Nagoya, damaging two of them. A further mission was flown five days later, but no claims were recorded.

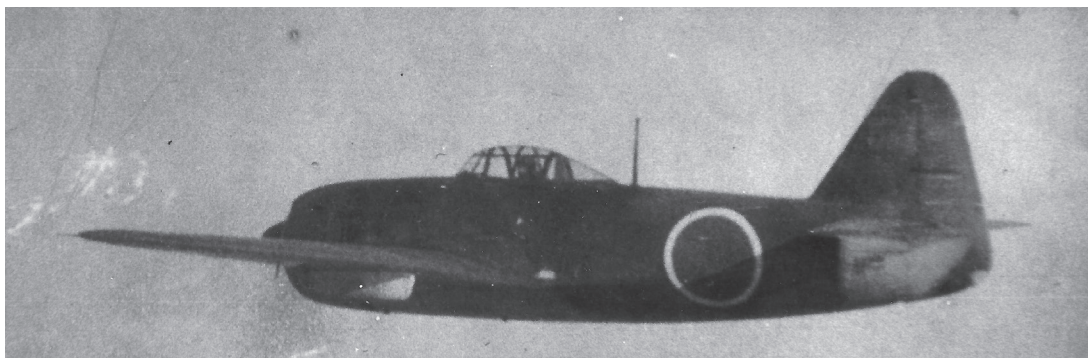
In January 1945 a primarily Shiden-equipped detachment from the 210th was sent to Tokushima, on Shikoku, to help defend Kansai and Nagoya from escalating B-29 raids. Pilots were credited with the destruction of two Superfortresses destroyed (one of which was shared with the JAAF) and three damaged.

Fellow training unit the Tsukuba Kokutai was also equipped with a small number of Shidens in early 1945, and these were involved in clashes with US Navy aircraft attacking the Kanto Plain in February. The first of these engagements occurred on the 16th when mixed formations of Zero-sens and Shidens clashed with Hellcats on three separate occasions. One F6F was claimed as destroyed and three damaged, one of the latter being credited to CPO Tomeshiro Hiro who later transferred to the 343rd Kokutai. A single Shiden and five Zero-sens were lost in return, and there were no serviceable N1K1-Js available to participate in the final mission of the day.

Veteran Shiden operator Sento 402nd Hikotai remained loyal to the N1K1-J well into 1945, continuing to fly the aircraft after all three units from the 341st Kokutai had switched to the recently formed 343rd Kokutai at Matsuyama in late January 1945. Its sister units would soon receive Shiden-Kais, however, and their combat experience with the definitive Kawanishi fighter is detailed in the next chapter. By mid-March Sento 402nd Hikotai had moved to the 601st Kokutai, with whom it would see plenty of action trying to defend Okinawa.

An instructor from the Tsukuba Kokutai runs the Homare engine up in his fighter whilst his groundcrew keep a weather eye on the undercarriage legs of the Shiden – the fighter's Achilles' heel. The training unit was equipped with a small number of N1K1-Js in early 1945, and these were involved in clashes with US Navy aircraft attacking the Kanto Plain in February





Ace WO Ryoji Oh-hara of the Yokosuka Kokutai goes in search of enemy aircraft during a patrol over the Kanto Plain in 1945

As previously noted, the 343rd Kokutai was a unique organisation within the IJNAF as it was an 'elite' unit formed by Capt Minoru Genda and staffed in the main by veteran pilots handpicked by him and his immediate subordinates. Slated to be equipped with the brand new Shiden-Kai, the kokutai initially consisted of Sento 301st Hikotai, Sento 701st Hikotai and Sento 407th Hikotai. It was later joined by Sento 401st Hikotai (which became a training unit) and Sento 402nd Hikotai (subsequently transferred to the 601st Kokutai) following their return from the Philippines.

The 343rd was still in the process of converting from the Shiden to the Shiden-Kai when the unit made its combat debut over the Inland Sea on 19 March, opposing US Navy aircraft from TF 58 targeting Kure. The kokutai would scramble 63 fighters, although only seven of them were N1K1-Js. Genda had drilled his pilots ceaselessly since the formation of his kokutai, emphasising formation tactics above everything else (as detailed in chapter five). He knew that the Shiden's inferior performance – slower rate of climb, top speed, less armament and shorter range – when compared to the Shiden-Kai meant that the two aircraft could not employ formation tactics together. Genda therefore decided that he would use eight N1K1-Js as cover flights for the Shiden-Kai. Sento 407th Hikotai and Sento 701st Hikotai would each contribute four aircraft, led by Lts Goro Ichimura and Ryoichi Yamada, respectively. The latter pilot had volunteered to fly a Shiden because no one else wanted to. Furthermore, he was familiar with the hard-to-control fighter following his service with Sento 402nd Hikotai in the Philippines.

The 343rd knew that TF 58 was coming on 19 March, as US Navy aircraft had attacked targets in Kyushu the previous day. Genda addressed all his pilots at Matsuyama at 0500 hrs and then sent three C6N Saiun reconnaissance aircraft off 40 minutes later to find the carrier force and radio back its position. At 0630 hrs Genda ordered the Shiden pilots to take off and circle the airfield at 16,400 ft. It would be their job to protect Matsuyama long enough for the 56 Shiden-Kais to get into the air safely. Each Shiden would be equipped with a belly tank in order to increase its range. This would be the first – and the last – day that the 343rd Kokutai would fly the N1K1-J in combat. Lt Ichimura was fully aware of the gravity of his mission;

'The result of our training for the past few months would be proven in a few hours. It was up to Lt Yamada and I, with two four-aircraft divisions codenamed "Hayate" ["swift wind"], to do our duty.'

Although Ichimura and his three pilots got airborne without any problem as dawn drew near, the right gear leg of Yamada's aircraft broke

while taxiing forward – a common occurrence that had plagued the Shiden throughout its short service life. Yamada abandoned his aircraft and requisitioned a fighter from the No 3 pilot in his formation. Although he was now an aeroplane short, Yamada was not overly concerned for the odd man out in the formation, CPO Takumi Sugitaki, was a combat veteran who had been transferred in from the Raiden-equipped 302nd Kokutai, with whom he had downed a B-29.

At 0650 hrs Genda received a wireless message from one of the Saiun, indicating that it had found TF 58. Its aircraft would have to pass almost directly over Matsuyama on their way to and from Kure. Genda ordered his pilots to start their engines and take off. The first wave of US Navy aircraft, approaching Shikoku and Kyushu from two directions, was less than 80 miles away. All the aircraft committed to the mission by the 343rd were now airborne and climbing hard to get above the enemy formations. There were at least seven ace aloft in N1K2-Js, and their exploits in the aircraft are detailed in chapter five.

With their airfield protection detail over, the Shiden pilots were ordered to follow their respective units into battle. Some 3300 ft above the climbing Shiden-Kais, Lts Yamada and Ichimura spotted the approaching Hellcats first. These machines belonged to VBF-17, embarked in USS *Hornet* (CV-10). Slashing through 20 F6Fs, Sento 407th Hikotai shot down or disabled about half of the formation. Ichimura arrived on the scene moments later;

'I hurried into battle, joining the combat. After that, I did not know what I was doing! The white star markings on one wing and the white lines on the other wing for identification persistently came into sight one after another. Each time we closed in, tracers from our four 20 mm cannon crossed with those from the Americans' 13 mm guns.'

Lt Yamada's division was behind and above Sento 701st Hikotai, providing it with top cover as the Shiden-Kais targeted VBF-17;

'I hurried to a position straight above the combat, which by now had turned into a melee. I watched and found Shiden-Kais hunting down the Grummans. As the zone of combat expanded, some of the Grummans were forced to get out of it. Once getting out of the zone, they could possibly regroup and come back with full advantage. I immediately knew that my duty was to hit such aircraft like swatting flies with a swatter, and began manoeuvring to attack a four-aircraft Grumman formation. I concentrated my energy and started my attack run, closing to within 330 ft of the tail of one of the Grumman fighters. He had not noticed me yet. I got so near that I needed no gunsight, pressing the firing button on the throttle lever. Within half a second the Grumman had caught fire. I gave him another burst for a quarter of a second. His wing flew off. The stout-looking Grumman banked. The power of the 20 mm cannon was great. My wingman [CPO Takumi Sugitaki] shot down another Grumman, too.



Lt Goro Ichimura had flown Raidens with the 302nd Kokutai prior to being posted to the 343rd Kokutai's Sento 407th Hikotai. He was one of seven pilots from the 343rd to see combat in the Shiden on 19 March, these aircraft acting as cover for the 56 Shiden-Kais that were sent aloft from Matsuyama to defend Kyushu

It was a key to victory in formation fighting to prevent enemy attacks while another section engaged.’

With his victory, Sugitaki became almost certainly the only pilot to claim kills in both the Raiden and the Shiden.

Lt Yamada had returned with his flight to Matsuyama at 0800 hrs, refuelled and then taken off again alone – the engines in the remaining two Shidens were running roughly after their first mission. Soon joined by the Shiden-Kai of WO Narunobu Ibusuki, Yamada spotted eight F4U-1Ds from VBF-10, embarked in USS *Intrepid* (CV-11), heading for Matsuyama to carry out a strafing attack. Diving on the Corsair in the ‘tail end Charlie’ position, he pressed the gun button when just 165 ft from his quarry but only the nose-mounted 7.7 mm weapons responded – the two 20 mm cannon in the wings remained silent. Although Yamada hit the enemy fighter, the rifle-calibre rounds failed to inflict much damage on the aeroplane. Having overshot his target, Yamada now found himself being pursued by two more Corsairs, one of which was flown by veteran fighter pilot Cdr John Hyland, commander of Carrier Air Group 10.

For seven minutes personnel at Matsuyama watched Yamada fly for his life, with Hyland and his wingman trying to finish off the Shiden. ‘In air combat training’, Yamada recalled many years later, ‘the pilot in the higher aircraft always attacks his lower opponent. The lower one is in the inferior position. Over the airfield, I was in such a position about five or six times. Finally, I did what’s called “the last-ditch manoeuvre” in American terminology. You take them down to the surface of the ocean and hope that they crash into the water. But they must have been very good pilots because they did not go down! Also, I was impressed that the two never came in at the same time.

‘If you glide, you cannot get hit. I continued to glide until, finally, I was about to go up by twisting. Then some bullets hit. One of them came and stopped under the sole of my boot. I sensed that I was hit, but I couldn’t be certain because I couldn’t see. So then we passed each other and I waved my scarf. The other guy was on his way back to the carrier and he also waved. That was our goodbye.’

Yamada’s fighter had been hit numerous times, resulting in the landing gear not fully lowering. The Shiden slid down the runway on its belly and eventually came to a halt. Yamada’s wingman Ibusuki had also had to fend off the attentions of two Corsairs, sliding his fighter out of the line of fire time and time again until the VBF-10 pilots broke off the engagement due to a lack of fuel. Ibusuki then landed at Matsuyama.

By the time the last TF 58 aircraft had left the area, the 343rd Kokutai had claimed an astounding 52 aerial victories over F6Fs and F4U-1Ds. Only two of these kills were credited to Shiden pilots, however.

OKINAWA

The TF 58 strikes on Japan had been mounted in preparation for the 1 April amphibious assault on Okinawa. In an effort to bolster the defences in the Ryukyu Islands in support of Operation *Ten-Go* (the last major IJN operation of the war), the IJNAF’s 3rd Air Fleet began transferring units to Kyushu to shore up the badly mauled 5th Air Fleet after its disastrous

Lt Ryoichi Yamada of the 343rd Kokutai’s Sento 407th Hikotai was also at the controls of a Shiden on 19 March, having volunteered to fly an N1K1-J because no one else wanted to, and because he was accustomed to flying the hard-to-control fighter following his service with Sento 402nd Hikotai in the Philippines. He would need all of that experience to survive a seven-minute dogfight with two Corsairs directly overhead Matsuyama airfield, the Shiden being hit numerous times and Yamada eventually having to belly land his battered fighter



offensive against US naval vessels between 18-21 March. Amongst the fighter forces posted in were eight Shidens from Sento 402nd Hikotai, which was now part of the 601st Kokutai. Reaching Kokubu No 1 airfield on 1 April, they were joined there by 14 N1K1-Js of the 210th Kokutai – the latter came under the command of the 601st.

The bulk of the aircraft sent to Kyushu were Zero-sens, as well as Suisei nightfighters, and these types would see most of the action. Shiden numbers were effectively halved because of persistent unserviceability issues with their Homare engines. Nevertheless, all eight N1K1-Js of Sento 402nd Hikotai, led by Lt Takuo Mitsumoto, were put up on 3 April as escorts – along with 32 A6M7s – for 30 bomb-laden Zero-sens and 19 Suiseis performing a Tokko attack on TF 58 as it sailed west of Amami Oshima island. The distance to the target was in excess of 400 miles, and three Shidens turned back with engine trouble. The remaining five fighters provided top cover for the suicide bombers until they were jumped by F4Us and F6Fs as they neared TF 58. Despite the intervention of the Zero-sen escorts, two Shidens and eight A6Ms were shot down – the IJNAF pilots in turn claimed ten US Navy aircraft destroyed and seven damaged.

It was the 210th Kokutai's turn to provide Tokko escort on 6 April, when 20 Zero-sens and ten Shidens (the latter led by Lt Kazumasa Mitsumori) covered 13 Suiseis attempting to attack TF 58 east of Okinawa. Again, engine trouble seriously affected the N1K1-J formation, resulting in five having to return early – a similar number of A6Ms had to abort too. Jumped by 40 F6Fs en route, the Zero-sen pilots put up a brave defence but their counterparts in the Shidens avoided engaging the US Navy fighters due to a lack of fuel. While the A6M could fly from Kyushu to Okinawa (400 miles) and remain in the combat zone for up to 20 minutes before having to head home, the N1K1/2-J did not enjoy such a generous range. Indeed, they were only able to fly as far south as Amami Oshima, 150 miles north of Okinawa. A solitary Shiden failed to return to base on 6 April.

The 210th Kokutai's Shidens flew uneventful patrols over the northern Ryukyu Islands on 11 and 14 April, although their effectiveness was again hampered by the fighters' modest range. The aeroplane's final combat during the Okinawa campaign came on 16 April when 30 Zero-sens and 11 Shidens (led by Lt Naruo Sekino of the 210th Kokutai) engaged Hellcats that had previously been fighting Shiden-Kais from the 343rd Kokutai between Amami Oshima and Kikai. The IJNAF pilots involved claimed seven enemy aircraft destroyed and five damaged, for the loss of one A6M. It would appear that most, if not all, of these successes were again made by Zero-sen pilots. Both the 210th Kokutai and the 601st Kokutai returned to Meiji and Hyakurigahara, respectively, shortly thereafter.

Very few Shidens remained in frontline service after the Okinawa campaign, a handful being used as fast reconnaissance aircraft by the 132nd Kokutai on Formosa and Teisatu 11 Hikotai in southern Kyushu.



CHAPTER FIVE

N1K2-J SHIDEN-KAI IN COMBAT

Sento 301st Hikotai pilots pose for a formal photograph at Matsuyama in January 1945, with Capt Genda and Lt Cdr Shiga seated fourth and fifth from the left in the front row. All squadrons within the 343rd Kokutai were comprised of approximately 40 pilots

The Shiden-Kai would be blooded in combat before it was declared operationally ready with frontline units. Production examples had begun to reach the newly formed 343rd Kokutai at Matsuyama in early January 1945, but a further two months would pass before the elite unit would finally be in a position to engage the enemy. By then, several veteran aces serving with the Air Arsenal and the Yokosuka Kokutai had fought US Navy fighters over the Kanto Plain on 16 February.

The first pilot to be credited with a victory whilst at the controls of a Shiden-Kai was Ens Matsuo Hagiri of the Yokosuka Kokutai, who had also been involved in the service flight trials of the J2M from Oppama in late 1943. An engineer by trade, Hagiri was highly valued within the unit for his analytical mind and immense physical strength – he once endured 9.5g in a test dive without blacking out. Hagiri was also an ace, having claimed five victories in China in 1940 with the 12th Kokutai in some of the earliest combats involving the A6M. After two years with the Yokosuka Kokutai, he endured two months of intense action over the Solomons with the 204th Kokutai, again in Zero-sens. Hagiri's score stood at 12 victories when he was severely wounded on



24 September 1943 and sent back to Japan. Following his recovery, he returned to the Yokosuka Kokutai.

During the late morning of 16 February 1945, the Air Arsenal and Yokosuka Kokutai scrambled a mixed formation of at least ten fighters – A6Ms, J2Ms, N1K1-Js and N1K2-Js – from Oppama. Amongst the pilots at the controls of the Shiden-Kais were Lt Shigehisa Yamamoto (the type's chief test pilot at the Air Arsenal) and 17-victory ace CPO Masao Masuyama, who had also served in China and claimed all of his victories flying with the 3rd Kokutai and 202nd Kokutai over the Philippines, Dutch East Indies and the Solomons. Masuyama had been an Air Arsenal pilot since April 1943. Fellow Solomon Islands veteran PO1c Shin-ichi Hirabayashi was in another Shiden-Kai, flying as wingman for Ens Matsuo Hagiri.

The pilots circled over Atsugi waiting for the low-flying carrier aircraft to appear from the southeast, and once they had spotted their foes, they employed 'dive and zoom' tactics developed by the Yokosuka Kokutai. Hagiri was the first Shiden-Kai pilot to claim a kill, downing an F6F for his 13th, and last, victory. He would subsequently attempt several, unsuccessful, interceptions of B-29s in Yokosuka Kokutai N1K2-Js in March and April before eventually being wounded yet again.

Fellow Yokosuka Kokutai Shiden-Kai pilot Ens Kaneyoshi Mutoh was scrambled after the main formation, although he quickly made up for lost time. A veteran of combat in China, the Philippines, the Dutch East Indies, the Solomons, eastern New Guinea and, most recently, Iwo Jima with the Yokosuka Kokutai, Mutoh had at least 23 kills to his name when he single-handedly engaged 12 F6Fs over Atsugi – these aircraft were probably from VF-82, embarked in USS *Bennington* (CV-20), which lost six Hellcats in combat over Honshu on this date. Mutoh claimed to have destroyed four aircraft (three of which were officially confirmed) with only short bursts of fire. His success was widely reported in the Japanese press, the diminutive ace's feat being compared to the actions of Musashi Miyamoto, a famed swordsman of the early 17th century who fought more than 50 Samurai at Sagari-Matsu. Mutoh would later become the

The first pilot to be credited with a victory whilst at the controls of a Shiden-Kai was ace Ens Matsuo Hagiri (right) of the Yokosuka Kokutai, who had also been involved in the service flight trials of the J2M in late 1943. He is seen here with WO Yuzaburo Toguchi at Atsugi in the spring of 1945, a handful of Zero-sens and a solitary Shiden-Kai being prepared for flight behind them

Ens Kaneyoshi Mutoh was one of only three pilots to achieve ace status with the Shiden-Kai, four of his kills being claimed on 16 February 1945 shortly after fellow Yokosuka Kokutai instructor Ens Hagiri had scored his solitary success with the aeroplane. Mutoh would later be killed during his very first combat mission with the 343rd Kokutai



only Yokosuka Kokutai pilot to claim five victories with the Shiden-Kai when he was credited with the destruction of a P-51 on 12 April and one B-29 destroyed and two damaged.

Overall, the pilots from the Air Arsenal and the Yokosuka Kokutai claimed 13 enemy aircraft destroyed and a further six probably shot down on 16 February for the loss of CPO Mitsugu Yamazaki, who bailed out of his fighter and landed safely. Shortly thereafter he was mistaken for an American pilot and beaten to death by irate civilians. From then on JAAF and IJNAF airmen made sure that small hinomarus were sewn onto their flightsuits and helmets.

343rd KOKUTAI

The only frontline unit to enjoy real success with the IJNAF's late war interceptors was the 343rd Kokutai in its second iteration. Originally formed on 1 January 1944 and slated to be equipped with Shidens, it had received just one N1K1-J by the end of February when it was decided that the unit would be issued with A6Ms instead. The 343rd was effectively wiped out in the ill-fated defence of Palau and Guam in June-July 1944.

The second 343rd Kokutai was formed as a direct result of a new strategy proposed by Capt Minoru Genda. A brilliant strategist, a combat veteran (with both land- and carrier-based units) and a former naval air attaché, Genda was serving with the IJN General Staff in 1944 when he became increasingly alarmed at the ineffectiveness of naval fighter units in their attempts to defend IJN vessels battling the US Navy as it clawed back territory once held by Japan in the southwest and central Pacific.

'In late 1944 I thought thoroughly about the unfavourable war situation', Genda wrote in his post-war memoir. 'Our battles were being lost because of defeats at sea. Defeat in battle was caused by the fact that we were overwhelmed in the air war. We were losing the air war because we had failed to secure air superiority with our fighters. In short, we were losing the war because our fighters were being defeated.' Following the IJN's heavy defeat at the Battle of Leyte Gulf in late October 1944, when it lost 26 warships (including four aircraft carriers and three battleships) and more than 300 aircraft, Genda proposed a new strategy to naval GHQ. Explaining that Japan was losing the war because the enemy had control

Capt Minoru Genda (left) and Lt Cdr Yoshio Shiga enjoy the spring sunshine at Matsuyama in 1945. As commander officer and executive officer, respectively, of the 343rd Kokutai, neither man flew operationally. Nevertheless, they were both qualified to fly the Shiden-Kai (indeed, Shiga had been heavily involved in its test programme at the Air Arsenal), and they routinely wore their leather flying helmets to show solidarity with their men



of the skies, he tabled a radical idea that saw the creation of an elite unit commanded by Genda, led by veteran squadron leaders and equipped with the IJNAF's newest fighter, the Shiden-Kai. His aim was to regain air superiority and try and turn the tide of war. Genda was duly given approval for his new unit.

Established on 25 December 1944, the 343rd Kokutai was subsequently attached to the 3rd Air Fleet on 10 February 1945. Genda had become its CO on 15 January, the 343rd calling Matsuyama airfield, on the island of Shikoku, home. The latter had been chosen by the CO of Sento 301st Hikotai, ace Lt Naoshi Kanno, after Yokosuka had proven to be too small for the unit's needs. The 301st would be the first unit assigned to the 343rd Kokutai, followed by Sento 407th Hikotai, Sento 701st Hikotai and Sento 401st Hikotai (which would function as a training unit). Sento 402nd Hikotai also briefly came under control of the 343rd prior to it being posted to the 601st Hikotai in March.

Upon his arrival at Matsuyama on 29 January, Genda set about assembling his staff. With 3000 flying hours in fighters, he knew exactly the calibre of men he needed – air officers that had fought in combat and distinguished themselves as leaders. Genda's first appointment filled these criteria, and more. A veteran of combat in China (where he had claimed four victories), the Pearl Harbor raid and numerous other carrier-based operations from *Kaga*, *Junyo* and *Hiyo*, recently promoted Lt Cdr Yoshio Shiga had also spent time as a test pilot with the Air Arsenal. He had been one of the first naval aviators to fly the Shiden-Kai. Indeed, when the 343rd was formed, there was no other pilot in the IJNAF as familiar with the N1K2-J as Shiga, who became its executive officer.

Fellow China War veteran Cdr Tadashi Nakajima, who had claimed three or four victories in 1937, and who later led the Tainan Kokutai in Rabaul and a kamikaze unit in the Philippines, was made vice-commander. Finally, Genda handpicked his squadron COs after reviewing a list of potential candidates from throughout the IJNAF. The three men he chose were all aces, and they would all subsequently perish in combat flying with the 343rd. Lt Takashi Oshibuchi, squadron leader of Sento 701st Hikotai, was also a veteran of the 251st Kokutai (formerly the Tainan Kokutai). Later made CO of the 203rd Kokutai's Sento 304th Hikotai, Oshibuchi had at least six victories to his name when he was posted to the 343rd after recovering from wounds he had suffered over Luzon.

'Oshibuchi's formation leading was splendid', Genda recalled. 'I had almost nothing to criticise about him. His relationship with his men was wonderful. They seemed to be proud to die with their leader.'

Unlike Oshibuchi, who joined his unit after its assignment to the 343rd, the CO of Sento 407th Hikotai had led the squadron since its formation in July 1944 when it was part of the 221st Kokutai. Flying A6Ms, Lt Yoshishige Hayashi had seen combat with the 407th in the Philippines. By the time the unit was posted back to Japan, minus its aircraft, in early January 1945, Hayashi had claimed five victories.

Sento 301st Hikotai's CO was 20+ victory ace Lt Naoshi Kanno, who joined the unit with a fierce reputation as a dogfighter with a violent temperament. A veteran of the Marianas and Philippine campaigns with the 201st Kokutai's Sento 306th Hikotai, Kanno had been appointed

leader of the kokutai's first kamikaze team. However, he was in Japan collecting replacement aircraft when the mission was flown from Mabalacat. Distraught at the news, Kanno vowed to fight on with the 301st. His effectiveness as a fighter pilot is proven by the simple fact that none of his contemporaries who commenced their combat careers in 1944 attained as high a score as Kanno.

Aside from an experienced officer cadre, the 343rd also had a core of enlisted pilots that had seen combat in Rabaul and the Philippines. 'We assembled outstanding fighter squadrons from the start', Genda explained. 'There were veterans, of course, but there were also many unskilled pilots too'. Indeed, the latter made up 55 per cent of the naval aviators assigned to the kokutai. Some of the combat-seasoned enlisted men who had joined the 343rd did so with their respective squadron leaders, while others were handpicked by the kokutai in accordance with Genda's needs. Survivors from the three Shiden-equipped units previously under the control of the 341st Kokutai, which had seen heavy action in the Philippines, were also posted to Matsuyama.

The most famous NCO pilot to transfer in was CPO Shoichi Sugita, whose combat career had started with the 204th Kokutai in the South Pacific. Involved in the ill-fated Admiral Isoroku Yamamoto mission, he bailed out with severe burns in August 1943 after being shot down by Corsairs near Ballale. Sugita returned to the fighting with the 201st Kokutai over the Marianas, retreating to the Philippines with the unit. By the time he joined Sento 301st Hikotai, Sugita had claimed nearly 120 victories (historians have since stated his tally was closer to 70, 30 of which were shared kills).

Sugita brought his wingman, CPO Tomokazu Kasai, with him from the 201st Kokutai. An ace in his own right with ten victories to his name, Kasai occasionally served as wingman to Lt Kanno too. The ranking NCO ace in Sento 407th Hikotai was WO Minoru Honda – he was also the unit's senior NCO, fighting with it over the Philippines. Having served with the unit since its formation, Honda had survived considerable combat with the Kanoya Kokutai in the Solomons in 1942-43. Indeed, he had even been declared dead after he failed to return from a mission. Honda eventually made it back to base some ten days later with the help of friendly natives. Although a strict disciplinarian, Honda proved to be an effective tutor for the new pilots assigned to the 343rd.

With four F6F victories to his name flying the Shiden off Taiwan, 31-year-old Ens Akio Matsuba had been one of the last pilots to escape from the Philippines with Sento 701st Hikotai. A veteran of the China War, combat from the carrier *Ryūjō* and the defence of Iwo Jima with Sento 301st Hikotai, Matsuba had a tally of 18 victories when Sento 701st Hikotai was transferred to the 343rd Kokutai. Upon his arrival at Matsuyama, Matsuba was ordered by Genda to give a special two-hour lecture on his experiences with the Shiden in combat.

Fellow aces WO Isamu Miyazaki and CPO Mitsuo Hori were also posted in, as were battle-hardened pilots WO Narunobu Ibusuki and CPO Toshio Tanaka. Finally, legendary ace Ens Saburo Sakai served as an instructor with Sento 701st Hikotai until June 1945. The 64-victory ace was prevented from flying combat missions with the unit after he had lost

Thirteen-victory ace WO Isamu Miyazaki was amongst the combat veterans handpicked for service with the 343rd, being sent to Sento 301st Hikotai



an eye during the aerial battle for Guadalcanal in August 1942. Following a long recuperation, Sakai had fought with the Yokosuka Kokutai over Iwo Jima in 1944. However, his failing eyesight badly affected his performance in combat, resulting in Sakai being restricted to the role of fighter instructor – a task he performed with distinction in the 343rd.

The neophyte fighter pilots received intensive instruction from the veteran naval aviators at Matsuyama, who placed special emphasis on quick takeoffs and formation flying. Each squadron also conducted eight-versus-eight mock dogfights as more Shiden-Kais started to arrive at Matsuyama. Despite receiving a steady flow of new aircraft, the 343rd was still in the process of converting to the N1K2-J in mid-March. Each of the squadrons in the kokutai was supposed to be equipped with 48 Shiden-Kais, yet despite Kawanishi working round-the-clock, only 35 aircraft had been delivered in January, followed by 47 in February and 56 in March. Finished aircraft were flown directly from the Naruo plant to Matsuyama by pilots from the 343rd.

Like the Shiden before it, the Shiden-Kai was also plagued by technical problems, most of which afflicted the aeroplane's Homare 21 engine. The latter was forced to run on poor-quality fuel, ranging anywhere from 85 to 100 octane, which meant that groundcrew were constantly having to adjust the 18-cylinder powerplant.

The 343rd was forced to keep using a dwindling number of N1K1-Js to make up the numbers as it strived to perfect new tactics demanded by Capt Genda. Lt Zenjiro Miyano, commander of Sento 204th Kokutai, had recognised the strengths of the American fighter formations that IJNAF pilots had started to encounter over Rabaul in late 1942. The four-aircraft division favoured by the USAAF, US Marine Corps and US Navy had proven to be more effective, and dangerous, than the three-fighter vic formation that the Japanese had perfected in the China War and carried on into the Pacific War. It was found that in a melee, the third man was easily separated and left with no protection. Reacting to this, Miyano had become the first unit commander to adopt the four-aircraft division in early 1943. By the time of his death in combat on 16 June that same year, Miyano had been credited with 16 victories and the Sento 204th Kokutai 228 kills under his leadership.

The 343rd formulated its own tactics based on the four-aircraft division. Section leaders in a four-aircraft division flew the first and second fighters, with the first flight being covered by the second flight. The section leader was paired with the No 3 pilot, while the No 2 pilot teamed up with No 4. Of the 120 pilots assigned to the kokutai, roughly ten per held an 'A' class rating that meant they could participate in day and night operations. They were the hardcore veterans. Most pilots, however, were rated 'C' class, which meant that they could only perform daytime operations under the guidance of a more experienced section leader.

INTO COMBAT

Capt Genda was adamant that his unit would not engage the enemy until he, Cdr Nakajima and Lt Cdr Shiga were confident that the 343rd's pilot cadre were ready to do so. 'Once we had completed building up

Six-victory ace Lt Takashi Oshibuchi joined Sento 701st Kokutai as its squadron leader following the unit's assignment to the 343rd Kokutai. He had claimed two victories with the Shiden-Kai by the time of his death in combat with US Navy fighters on 24 July 1945



a powerful air group', Genda wrote in his memoir, 'and once the fighters were launched, we intended to mow down a throng of enemy fighters like a raging wave of the sea. So I planned not to use our fighters in combat before they completed their training, in about the middle of May. That was our intention, but the enemy's plan was different.'

Genda and his senior officers had formulated various intercept strategies against the anticipated carrier strikes, and war games had been played out using large maps of the area surrounding Matsuyama.

On the morning of 18 March the 16 carriers of TF 58 sailing off the southern coast of Kyushu launched their attack. The vessels' presence came as no surprise to the IJNAF, as they had been detected by Japanese radar and patrol aircraft. Tasked with knocking out airfields on Kyushu that could be used as staging areas for kamikaze units in advance of the amphibious assault on Okinawa, hundreds of US Navy aircraft strafed and bombed bases in a series of attacks that resulted in American pilots claiming 102 Japanese aeroplanes shot down and 275 destroyed on the ground.

The 343rd Kokutai's C6N Saiuns had spotted the vast armada of US Navy aircraft heading for the mainland on the 18th and radioed a report back to Matsuyama. Genda had in turn ordered 72 Shiden-Kais and Shidens into the air under the command of Lt Takashi Oshibuchi. The aircraft quickly formed up and headed for Cape Muroto, east of Kyushu. From here, they hoped to defend Matsuyama from attack. However, a division of four Hellcats on an armed reconnaissance mission managed to slip through undetected and strafe the airfield, on which only a handful of aircraft remained. Oshibuchi and his fellow pilots saw nothing during their patrol and eventually returned home.

Targets – primarily naval vessels, including the battleship *Yamato*, of the IJN in and around Kure harbour – for 19 March were chosen following the debriefing of reconnaissance pilots, with the official history of TF 58 noting;

'Commander Task Force 58 decided to attack these units [a large number of major fleet units] the following day, with the harbour installations at Kure and Kobe as alternate targets. Fighter sweeps against intervening airfields on Shikoku and western Honshu were to precede and follow these strikes.'

By the early morning of the 19th the carriers of TF 58 had repositioned themselves east of Kyushu and south of Shikoku. While US Navy pilots conducted their final pre-mission briefings and their aircraft (more than 300) were prepared for a dawn launch, at Matsuyama Capt Genda addressed his pilots;

'The enemy's invasion is inevitable this morning. We are going to intercept the enemy aircraft and deal a severe blow to them. Our target is the enemy's fighter force. Do not give your eyes to bombers – ignore them. Try to shoot down as many of the enemy fighters as possible!'

Three C6N Saiun reconnaissance aircraft were sent aloft from Matsuyama at 0545 hrs with orders to locate the American task force, and at 0650 hrs Genda received news that vessels had been sighted approximately 30 miles south of Cape Muroto. With seven Shidens already circling overhead, providing protection for the airfield, 56 Shiden-Kais from Sento 301st Hikotai, Sento 407th Hikotai and Sento 701st Hikotai took off. Seven line-abreast formations of eight aircraft departed one after another, the scramble being over within ten minutes.

Having not seen any action in several months, the veteran pilots of the 343rd were keen to test their new fighters in the crucible of aerial combat. Enjoying a height advantage and with the sun at their backs, the N1K2-J pilots dove on formations of Hellcats primarily from VBF-17 embarked in USS *Hornet* (CV-12). As they had been taught, the IJNAF pilots, again led by Lt Oshibuchi, made two-aircraft section attacks from above, then recovered together and climbed back up to the rest of their formation in order to retain their height advantage, before attacking again. Within minutes the US Navy fighter pilots realised that their adversaries were skilled and dangerous – this was not going to be a repeat of the Marianas ‘turkey shoot’. Leading the way, Oshibuchi claimed two victories and his wingman, CPO Kikuichi Ishikawa, one before he in turn was killed. Second element leader Ens Akio Matsuba also downed two prior to his fighter being shot up. The third element was credited with three victories, but its leader, Lt Kunio Matsuzaki, was killed, as was his counterpart in the fourth element, Lt(jg) Yukihiro Watabe.

Just as he was about to follow Oshibuchi and Sento 701st Hikotai into combat, Lt Yoshishige Hayashi, leading the Sento 701st Hikotai formation of 16 Shiden-Kais, received an urgent radio call that Matsuyama was about to be attacked by Hellcats. Realising that the airfield now had no fighter cover (the seven Shidens had joined up with their respective units), he led his pilots back to Matsuyama. Six F6Fs from VF-83 were engaged head-on at an altitude of 10,000 ft directly overhead the airfield, the action being watched from the ground by ace CPO Mitsuo Hori;

‘My heart swelled with pride when I saw 16 of our fighters racing back to the airfield. No sooner had both formations clashed when an aircraft flamed and fell. It was a stumpy-looking machine. We got it! A Grumman was going down! Victory! Excited shouts of joy whooped around the squadron’s command hut. The combat was going to be won by our Shiden-Kais! A total of more than 40 friendly and enemy aircraft fighters had engaged. Again, another Grumman went down trailing smoke.’

Lt Hayashi was soon forced to leave the melee when his undercarriage lowered unexpectedly and he could not retract it. Managing to avoid the numerous Hellcats in the area, he fled towards Iwakuni airfield. During his post-war interrogation, Capt Genda commented on the undercarriage problems that proved to be the Shiden-Kai’s most serious failing in combat;

‘It was very poor – much worse than on the average Japanese aircraft. When dive-bombing or strafing, if the aircraft reached 420 mph, the gear was apt to fall apart in the air. About a quarter of the pilots we lost in combat fell for this reason. The Shiden-Kai got to be a better aeroplane toward the end, however.’

On a more positive note, the 20 mm Type 99 cannon had proven itself to be a deadly weapon. Ens Matsuba, who claimed two successes prior to his fighter being shot up, reported to Capt Genda that the power of the cannon was ‘enormous’, stating that ‘if our range is right the enemy can be knocked out with one burst’.

VBF-17 had indeed felt the full force of the Shiden-Kai’s powerful battery of four cannon, losing nine fighters. The unit’s mission report for 19 March reflected the high calibre of the opposition it had faced over Shikoku;



Sento 301st Hikotai’s CO was 20+ victory ace Lt Naoshi Kanno, who joined the unit with a fierce reputation as a dogfighter with a violent temperament. Always in the thick of the action, he claimed a further four victories with the Shiden-Kai before he was lost on 1 August

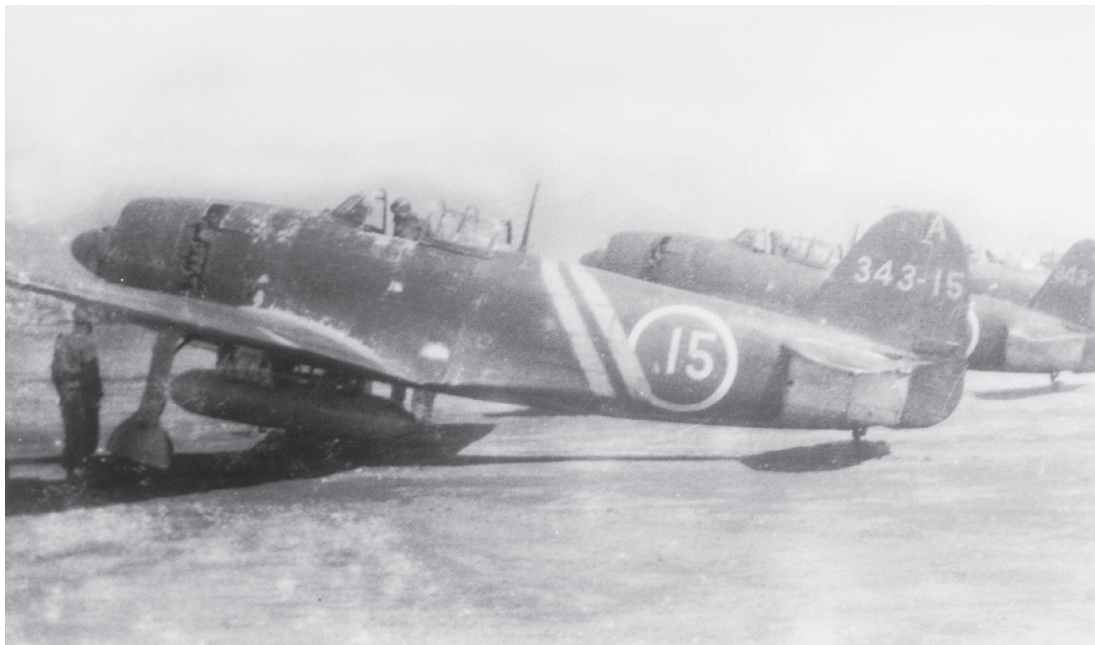
‘It was the opinion of the more experienced pilots of this squadron, who participated in this melee, that the Jap pilots encountered here were superior to those met in the Tokyo area. They handled their aircraft well, were exceedingly aggressive and exhibited good organisation, discipline and tactics. Their tactics were similar to those of the US Navy. They appeared to be well trained and experienced in combat flying.’

The last of the three Shiden-Kai units to see action on 19 March was Sento 301st Hikotai, led by ace Lt Naoshi Kanno. Having failed to entice Hellcats, Helldivers and Avengers from Air Group 84, embarked in USS *Bunker Hill* (CV-17) and en route to Kure harbour, into action, Kanno and his pilots became embroiled in two separate dogfights with F4U-1Ds from VBF-10 and VMF-123. Losses on both sides were heavy, and again the American pilots were taken aback by the skill of their opponents. ‘The Jap tactics closely resembled standard American tactics’, noted the VMF-123 combat report. ‘The enemy attacked in divisions and sections. All attacks were well coordinated and nearly always by two-aircraft sections. They struck our aircraft when we were on the outside of our turns. Their marksmanship and airmanship were as fine as our pilots have ever seen. The pilots were apparently the “cream” of the Jap air forces.’

Conversely, there were no particular comments from the IJNAF pilots on the quality of their American foes, although their Hellcats and Corsairs were admired for their rugged performance and rapid-firing machine guns.

A number of pilots from the 343rd flew a second sortie on the 19th, having refuelled and rearmed at Matsuyama or another nearby airfield. ‘The aircraft that got up for a second time engaged enemy fighters sporadically during their retreat from Kure harbour’, Capt Genda recalled. ‘We were not as successful as the first sortie because we were not able to hit enemy aircraft in such a large formation.’ By 1500 hrs all surviving pilots from the 343rd had been accounted for, including all three squadron commanders. Kanno had been shot down by Hellcats from VF-9 shortly after claiming an F4U-1D destroyed, his contemporaries Oshibuchi and Hayashi also being credited with a victory each.

Overall, claims by the 343rd Kokutai and pilots from TF 58 were very similar – the former tallied 52 aerial victories and the latter 63 kills. Both totals suffered from the usual overclaiming due to confusion in the heat of battle. TF 58 actually lost 14 fighters (including aircraft disposed of after returning to their carriers and being deemed to be too badly damaged to be repaired), with 11 Helldivers and two Avengers downed by flak. The 343rd had 15 fighters shot down and 13 pilots killed in aerial combat, with four more (including aces Kanno and Matsuba) wounded. Although last into combat, Kanno’s Sento 301st Hikotai had been credited with the most victories, including nine to CPO Katsue Katoh – this tally was revised to four destroyed and a probable. A veteran of combat in New Guinea and the Philippines, Katoh would make no further victory claims. Squadronmate CPO Shoichi Sugita demonstrated that he had lost none of the flying skill that had made him a high-scoring ace by downing three enemy fighters.



KAMIKAZE ESCORTS

The 343rd Kokutai would next experience action whilst trying to defend aircraft carrying out suicide attacks on US Navy vessels supporting the amphibious landing on Okinawa, which had commenced on 1 April. For this operation, the unit was transferred from the 3rd Air Fleet to the 5th Air Fleet on the very day of the invasion. Capt Genda was subsequently ordered to move his unit to Kanoya, on Kyushu Island, the 343rd commencing its base shift on 4 April. The kokutai's primary mission would be to open the air corridor for the flow of kamikaze aircraft heading southwest to Okinawa. This new assignment also meant that Shiden-Kai pilots would have to embark on very long-range missions, flying from Kanoya to Amami Oshima and back. The one-way distance was more than 240 miles, and these missions would last just over two hours. Furthermore, pilots only had sufficient fuel for a maximum of 15 minutes of combat at full power.

Just 48 hours after the last Shiden-Kai reached Kanoya from Matsuyama, the 343rd attempted to sortie 44 aircraft on an escort mission on 12 April. Groundcrew were struggling to keep the N1K2-Js airworthy due to poor-quality fuel, however, and two fighters refused to start and a further eight were forced to turn back with misfiring engines. With Lts Oshibuchi and Hayashi still at Matsuyama, Lt Kanno led the mission. Although only pilots from Sento 301st Hikotai and Sento 701st Hikotai participated in the operation, aircraft from all three units were used due to servicing problems.

As the formation neared the island of Kikaiga Shima, located midway between Kyushu and Okinawa, the 343rd pilots saw its airfield was coming under attack by Hellcats – these aircraft were from VBF-17, which had of course been badly mauled by the kokutai on 19 March. Kanno, leaving Lt Masaji Matsumura and his division to provide cover, dived headlong after several Hellcats that were in the midst of their strafing run. Ace CPO

CPO Tomokazu Kasai had flown as wingman to Shoichi Sugita during their time together in the 201st Kokutai, and the latter had made sure that the ten-victory ace was transferred to the 343rd Kokutai too. Following Sugita's death, Kasai flew as wingman to Lt Kanno



Shiden-Kai '343-A-15' of Sento 301st Hikotai was photographed at Matsuyama airfield on 10 April 1945 just before the unit departed for its new base at Kanoya.

Lt Kanno had this aircraft specially marked up with command stripes in the hope that they would attract the attention of enemy aeroplanes. Although he flew this machine on a number of occasions, as with other IJNAF units, pilots of the 343rd flew aircraft on an availability basis. Poor-quality fuel caused maintenance problems, making the assignment of individual aircraft to units all but impossible. Nevertheless, aircraft marked with command stripes such as those seen here were usually reserved for flight commanders

Tomokazu Kasai, flying as wingman to fellow ace CPO Shoichi Sugita in Kanno's division, tried to follow the latter, who, as per usual, did not wait for his men.

'Lt Kanno fired a burst at the enemy's first aircraft', Kasai recalled many years later. 'Suddenly it drew white smoke and nosed straight down. In succession, the second aircraft fell with white smoke as well.' Hearing the distress calls from the Hellcats under attack, the remaining two divisions of F6Fs then climbed up to meet the N1K2-Js. Two Shiden-Kais soon fell, and CPO Kasai knew that he could well be next.

'Fighters began to fall here and there. I could not see which aircraft they were, but they looked to be friendly. I wouldn't be defeated! I wouldn't become separated from my formation. Then, abruptly, CPO Sugita rolled and dived down. Immediately, I followed him. Looking ahead, an F6F was seen. He was in my gunsight. Right at that moment I forgot that I was to maintain formation with my section leader. I fired my four 20 mm guns. The vibration was pleasant. Tracers were absorbed into the enemy aircraft. I did it at last! He began trailing black smoke and went down. Immediately, I followed him. Then I realised that I was alone and looked for CPO Sugita, but he was nowhere to be seen. I had gone too far! We were not allowed to leave the formation. Formation fighting was Capt Genda's principle, but I had ignored it.

'I looked around, but I saw only enemy fighters everywhere. Then I saw three enemy aircraft below. They were at a position suitable for an attack from behind and above. I dived down right away and closed on the first aircraft to about 50 metres. I squeezed the firing button. I saw the pilot lean backwards and then fall forward in the cockpit. I continued to engage the second aircraft. I caught him in the gunsight and squeezed the button again, but my guns did not fire! Realising that I was now defenceless, I dived. When I pulled up, I was almost on the deck, so I fled. I looked up and saw two F6Fs chasing me. I crept along, skimming the sea. The enemy aircraft suddenly became four. They were persistent, and I was determined to ram them if they attacked me. One of them started to smoke and the remaining three then pulled away.'

Although initially facing just VBF-17, the 343rd had soon been engaged by Hellcats from VF-17 and Corsairs from VMF-112 – the kokutai eventually took on an estimated 80 fighters. Outnumbered, the 343rd had suffered heavy casualties on this mission, with nine pilots from Sento 301st Hikotai and one from Sento 701st Hikotai being killed in what turned out to be something of a 'turkey shoot' by American standards. In return, the 343rd was credited with 20 Hellcats and three Corsairs destroyed. Only a fraction of this number had in fact been lost. CPO Sugita, who returned to Kanoya in a badly shot-up Shiden-Kai minus its canopy, claimed two Hellcats and a Corsair destroyed and a second F4U-1D as a probable. Kasai also claimed two F6Fs, but Sugita questioned the authenticity of these kills and Kasai amended his victories to probables. Fellow aces Lt Naoshi Kanno and CPO Mitsuo Hori were among those pilots to make single kill claims.

In their post-mission reports, US Navy and US Marine Corps pilots involved in this fiercely fought engagement noted that their opponents were flying well-armoured aeroplanes that 'were hard to burn due to their

armour plating and self-sealing tanks'. It was also stated that the IJNAF fighters were fitted with 20 mm cannon only – 'there are no small-calibre guns'. Although both Corsair and Hellcat pilots acknowledged that the Shiden-Kai could outturn both types, the Japanese pilots were criticised for their lack of organised tactics. Naval aviators from VF-17 also noted that the enemy fighters had excellent climbing characteristics and superior speed. When confronted with Hellcats on their tails, the Japanese pilots would snap-roll to the left, their automatic combat flap system saving them time and time again.

The following day Sento 407th Hikotai arrived at Kanoya, followed by the rest of Sento 701st Hikotai on 14 April. Only a buntai from Sento 407th Hikotai remained at Matsuyama for airfield defence.

On 15 April Kanoya and nearby Kushira airfields were targeted by the US Navy for destruction, as both bases had been identified as key staging areas for kamikaze missions. The approaching raid was detected by Japanese radar, and Capt Genda ordered an immediate scramble in the belief that he still had ample time to get aircraft safely aloft. However, 28 Hellcats from VF-46 (embarked in USS *Independence* (CVL-22)) and VF-12 (flying from USS *Randolph* (CV-15)) arrived over Kanoya much sooner than Genda had expected. He immediately ordered the scramble to be aborted. One of the pilots already in the cockpit of a fighter was CPO Tomokazu Kasai;

'At the warning "Enemy formation sighted, heading north for Kanoya", the four pilots in my division started the engines of their fighters. There was almost no time for a warm-up. The first and third aircraft raised violent smoke and dust. CPO Sugita looked back from his cockpit and pointed upward and had begun to take off when seven or eight Grummans dived in a strafing run at his aircraft. I was stunned. Just as I signalled for the wheel chocks to be removed a rocket hit the wing of my fighter and blew a big hole in it.'

Leading the attack was the CO of VF-46, Lt Cdr Robert 'Doc' Weatherup, who consistently achieved the best air-to-air gunnery scores in his squadron;

'As we approached Kanoya I could see several aircraft taxiing and apparently preparing to take off. I decided to attack the airfield. I picked out an aircraft [or a decoy] in a revetment and fired my rockets at it and then strafed until I had to start my pull-out. As I was getting level again, I saw that two aircraft were starting their take off. I decided to take the lead aircraft, but I was forced to pull pretty hard in a high turn of nearly 270 degrees to get on his tail. By this time the lead aircraft was probably at about 400 ft and starting a slight turn. I decided to take the first aircraft, thinking that it was probably flown by a senior flight leader, and that their formation might fall apart without him. I also presumed that some of my other aircraft would take the following fighter.

'At first I had a little too much lead, and the target aircraft apparently saw my tracers and relaxed his turn. Almost immediately I started to see "flicks" where my bullets were hitting armour or heavy structure. Soon thereafter, the target aircraft started to nose over. I continued to fire until I had to pull up. The target aircraft did not burn until it crashed, although there may have been a little smoke.'



The most famous NCO pilot to transfer into the 343rd Kokutai was CPO Shoichi Sugita, whose combat career had started with the 204th Kokutai in the South Pacific in late 1942. By the time he joined Sento 301st Hikotai, Sugita had claimed nearly 120 victories. Credited with seven kills in the Shiden-Kai, he perished on 15 April 1945 when his fighter was shot down shortly after taking off from Kanoya airfield

CPO Shoichi Sugita, the legendary 'King of Aces' who had been in constant action since mid-1942, was killed instantly when his fighter crashed. Capt Genda, Lt Cdr Shiga and Ens Sakai witnessed his demise, as did CPO Kasai. 'An incredible scene came into my eyes,' the latter recalled. 'At a burst from a Grumman, Sugita's aircraft banked abruptly and crashed. Black smoke rose into the air from the end of the airfield.' Moments later, Weatherup also downed Sugita's wingman, PO2c Toyomi Miyazawa, whose fighter sustained many hits but did not burst into flames. Instead, it dropped from 800 ft into a pine forest east of the airfield.

'CPO Sugita was Lt Kanno's favourite pilot,' Capt Genda wrote in his post-war memoir. 'I could imagine his shock. I apologised to him in front of Sugita's corpse [it had been retrieved from the wreckage of his fighter and taken to the base hospital]. I told Lt Kanno that I was to blame for his death because I had delayed the abort order. I had no excuse. I also made a promise to him that I would find a replacement pilot of equal skill. Lt Kanno was dazed and said nothing.'

The combat experience of the 343rd Kokutai in the handful of engagements it had fought since 18 March had starkly revealed that even with good leadership, experienced aviators (the unit-wide average was 500 hours of flying time per pilot) and a superb fighter, one kokutai could do little to stem the Allied tide of destruction now washing over the home islands of Japan. American radar-directed Combat Air Patrols, an overwhelming number of Hellcats and Corsairs and excellent radio communications were costing the IJNAF dearly.

During the morning of 16 April the 343rd would again support the kamikaze offensive targeting US Navy vessels off Okinawa by attempting to clear a path through American fighter cover for the highly vulnerable Tokko aircraft heading south. Although 40 fighters were slated for the mission, four were unable to take off due to mechanical problems and

three more aborted as the formation headed for Amami Oshima. Lt Takashi Oshibuchi was in charge of the mission, supported by his fellow squadron COs Lts Hayashi and Kanno. As the IJNAF pilots approached their destination at 19,500 ft, unbeknownst to them their progress had been monitored for the previous 30 minutes by American radar. A large number of Hellcats from VF-17 and VF-47 (the latter embarked in USS *Bataan* (CVL-29)) were vectored to meet them, approaching the Shiden-Kai formation with a height advantage.

With no fuel reserves, and operating at the very limit of their range, the 343rd pilots could only engage the enemy fighters for 15 minutes at the very most. Thirteen-victory ace WO Isamu Miyazaki of Sento 301st Hikotai was one of the first pilots to see the F6Fs, spotting 12 fighters from VF-47. A veteran of combat over the Solomons, New Guinea, the Marshall Islands and Wake Island, he later recalled, 'When we spotted

On 16 April 1945, 33 Shiden-Kais from the 343rd attempted to clear a path through American fighter cover for highly vulnerable Tokko aircraft heading south as part of the kamikaze offensive against US Navy vessels off Okinawa. Nine pilots would be lost during this mission, including nine-victory ace CPO Teigo Ishida, who was flying his very first mission with Sento 407th Hikotai. He simply vanished in the opening moments of what proved to be a one-sided engagement with US Navy Hellcats



16 enemy aircraft, the 1st Chutai separated itself from the 2nd and 3rd Chutai in order to gain altitude above the enemy.' As Oshibuchi's 1st Chutai made a climbing turn they lost sight of the F6Fs. To make matters worse, poor radio communication meant it could not contact the rest of the 343rd either.

Naval aviators from VF-47 had first seen the approaching Shiden-Kais when they dropped their belly tanks, the American pilots immediately calling for reinforcements. The latter took the form of VF-17, which closed on the 11 fighters of the 2nd Chutai, led by Sento 407th Hikotai CO Lt Hayashi – who was fixated on the VF-47 aircraft ahead of him and wrestling with a drop tank that refused to release. The 2nd Chutai was taken completely by surprise when VF-17 bounced it from behind. One of the first pilots shot down was Hayashi's wingman, nine-victory ace CPO Teigo Ishida, who was flying his very first mission with Sento 407th Hikotai. With victories over northwestern Australia, the Solomons and the Philippines, Ishida simply vanished in the opening moments of what proved to be a one-sided engagement.

Lt Kanno's 3rd Chutai, ordered to fly top cover for the 2nd Chutai, soon joined the fray in support of the beleaguered Sento 407th Hikotai pilots. 'Lt Kanno and his men dived down to aid the 2nd Chutai,' recounted WO Miyazaki. 'My division took their place as top cover, some 300 m above the combat. After a while Grummans started retreating with damage, but those were only the first group. The second and third groups came to their aid by means of good radar and good radio communications. Once we committed to the battle, my Nos 2 and 4 men, CPO Wataru Tomisugi and



Another ace to fall on 16 April was CPO Katsue Katoh, who had been the 343rd Kokutai's top scorer with nine victories on 19 March. These kills made him the ranking Shiden-Kai ace, although his claims were never officially recognised by the IJNAF



Kanoya airfield comes under attack by B-29s during XXI Bomber Command's spring offensive against Kyushu. The 343rd briefly operated from here, before relocating to Kokubu No 1 airfield, 25 miles north of Kanoya. The latter, often packed with suicide aircraft, proved to be too crowded for the Shiden-Kai unit. It was also a regular target for USAAF bombers

PO1c Taro Asama, became separated from my division and lost altitude. Despite having to fend off attacks from Grummans, I tried to offer them assistance. After the combat had ended, I waited for them at the assembly point but they did not come. I regretted very much that I had lost them due to my poor judgement.'

Aside from Tomisugi, Asama and Ishida, the 343rd had lost six more pilots, including the high-scoring hero of 19 March, CPO Katsue Katoh. Three F6Fs were in turn claimed to have been destroyed, but none were actually lost. VF-17 was credited with seven kills and VF-47 claimed no fewer than 22 enemy aircraft destroyed. The mission report by the latter unit read as follows;

'Pilots of VF-47 who participated in this air battle came out of it with tremendous confidence in the F6F-5. They feel that their aircraft offers them tremendous advantages in firepower, armour protection and speed over the Japanese "Zeke", "Tojo" or "Tony". Even the F6Fs that were hit carried their pilots back to base. In contrast, the Jap aircraft burned easily, often broke up when hit and seemed to lack effective firepower when in a good offensive position. Moreover, the F6F-5 easily matches the speed of these Japanese fighters. It is evident, however, that these Jap aircraft can out-turn an F6F.'

BATTLING B-29s

With kamikaze attacks proving to be a major threat to Allied naval vessels supporting the Okinawa invasion, Admiral Chester Nimitz, Commander in Chief, US Pacific Fleet and Pacific Ocean Areas, requested that XXI Bomber Command target airfields on Kyushu. Although Gen Curtis LeMay was not enthusiastic about his strategic bombers attacking tactical targets, he was ordered to comply. Six missions were initially scheduled, commencing on 17 April, with six airfields being targeted.

Twenty-four hours earlier, the 343rd Kokutai relocated to Kokubu No 1 airfield, 25 miles north of Kanoya. The latter, often packed with suicide aircraft, was proving too crowded for the Shiden-Kai unit. It was also being increasingly targeted by USAAF bombers. Ironically, the very day the 343rd moved, Kokubu was attacked by B-29s. Although little damage was done, it prompted Capt Genda and his senior officers to plan how best to oppose Superfortress raids.

Unlike the J2M Raiden, the N1K2-J had not really been designed for high-altitude interceptions. Indeed, according to Lt Cdr Shiga, the fighter's Homare 21 engine suffered a significant loss of power above 21,000 ft. In earlier attacks on the B-29s, both the JAAF and the IJNAF had discovered that the most effective way to engage the bomber was from head-on. Lt Naoshi Kanno had experimented with this tactic when attacking B-24s over Yap, in the Caroline Islands, whilst flying A6M5s with the 201st Kokutai in the summer of 1944. He had soon discovered that 20 mm rounds fired in such an attack flew over the target as the pilot lowered his fighter to fly under the bomber. Kanno and his fellow pilots found that this could be corrected by rolling the fighter onto its back and firing at a point ahead of the bomber whilst upside down. Only the very best pilots could successfully carry out such an attack.

Lt Yoshishige Hayashi disagreed openly with Lt Kanno about his inverted head-on method, stating that a vertical dive was the best form of attack. The discussion got quite heated, with Hayashi bellowing at Kanno, 'I won't come back if I can't shoot down a B-29!' Kanno in turn retorted, 'Please do as you like! I won't come back either if I can't destroy a bomber!'

The 343rd finally got a chance to engage the Superfortresses on 21 April, when 217 attacked nine airfields, including Kokubu. A total of 23 Shiden-Kais were scrambled shortly after dawn, with Lt Oshibuchi in overall command. Lt Hayashi and PO1c Toshinobu Shimizu both went after a 19-aircraft formation, only for their fighters to be hit by defensive fire. Hayashi tried to ditch just off the beach at Akune, but he fractured his skull and was killed when the Shiden-Kai came to an abrupt halt in shallow water. Shimizu died when his aeroplane plunged into the sea west of Warabi Island.

The only 343rd pilot to claim a victory was Lt Kanno, whose formation had pursued B-29s over the sea off Miyazaki – no aeroplanes were reportedly lost by XXI Bomber Command, however. Having climbed as high as 29,500 ft in the expectation that the B-29s would attack from this altitude, the Shiden-Kai pilots had been wrong-footed by the bomber crews, who came in at less than 20,000 ft. Furthermore, the three squadrons of fighters sent aloft by the 343rd had patrolled separately, rather than together. This had reduced the effectiveness of the attacks that were made. Indeed, the unit's mission summary noted that, 'It is necessary to concentrate fighters on a specific B-29 formation. Accurate and speedy information is indispensable for this purpose.'

The 343rd's less than successful debut against the B-29s drew scathing criticism from Vice Admiral Matome Ugaki, who wrote in his diary;

'About 280 B-29s came over our naval air bases in Kyushu from 0630 hrs to 0830 hrs and inflicted considerable damage. In particular, the runways at Kasanbara, Usa and Izumi were bombed and rendered inoperable. The American use of timed-delay bombs is troublesome. Zero-sen fighters that went up from Kasanbara could not come back to base and landed here and there instead. Their dismal results are thought to have been caused by their lack of will to fight and inadequate methods of interception, as well as the use of the Shiden-Kai.'

On 22 April the 343rd sortied 14 Shiden-Kais, which intercepted a small force of B-29s. The unit's mission report stated, 'At 0810 hrs, spotted an eight-aircraft formation heading southeastward east of Miyakonojo at 5000 m in a retreat after bombing the Izumi area. Immediately started attack and chased them up to and over the sea southeast of Miyazaki. Damaged one B-29.' The latter was credited to WO Narunobu Ibusuki from Sento 701st Hikotai. One B-29 was indeed lost from a force of 87 bombers, and this may well have been the aircraft attacked by Ibusuki.

Three days later the 343rd moved to Omura airfield, as Kokubu was being continually targeted by American aircraft – it was bombed eight times during the unit's nine-day stay. On 29 April 111 B-29s again bombed airfields on Kyushu, and CPO Itaru Shikano of Sento 301st Hikotai was scrambled with the rest of the aircraft that were being held on standby at Omura. With his fighter slowed by a poorly running engine, Shikano (a veteran of carrier operations in the Solomons and Marshall Islands from



Lt Yoshishige Hayashi was already serving as CO of Sento 407th Hikotai when it was assigned to the 343rd Kokutai in early January 1945, having led the unit since its formation six months earlier. He 'made ace' with a solitary victory in the Shiden-Kai prior to being killed attempting to ditch his battle-damaged fighter on 21 April 1945

Zuiho) fell far behind the rest of the Shiden-Kai formation. Eventually spotting a formation of B-29s, Shikano dived at one from above and saw his rounds knock out an engine. Moments later his Shiden-Kai was hit in the canopy and rear fuselage by defensive fire from the bombers, sending the aeroplane spiralling away out of control. Shikano soon blacked out, and when he came to he was floating earthwards beneath his parachute. Badly wounded, Shikano never returned to flying.

By early May Capt Genda had come to the realisation that a force of 30+ fighters (which the 343rd typically scrambled to oppose B-29 raids) was incapable of effectively intercepting several large formations of bombers. He therefore decided to focus the Shiden-Kais from all three squadrons against one formation in an attempt to destroy it. The unit got the chance to test this theory on 5 May when 54 B-29s from the 314th BW attacked five airfields. All airworthy N1K2-Js were scrambled from Omura, with the aircraft flown by Lt Oshibuchi equipped with 60 kg No 27 aerial burst rockets – these had recently been delivered to the 343rd specifically for use against Superfortresses.

Pilots from Sento 407th Hikotai were the first to spot the bombers, Lt Goro Ichimura (who had replaced the recently killed Lt Hayashi) leading his men in an attack on a ten-aircraft formation that was flying over northern Kyushu at 19,600 ft. 'The flight that had been flying at the rear of the Shiden-Kai formation attacked first from straight above the enemy formation,' Ichimura recalled. His wingman, LA Shokichi Kuromoto, followed him into the action, hitting a B-29 sufficiently hard for it to start trailing smoke.

LA Kinzo Kasuya, the No 4 man in Ichimura's division, collided with B-29 42-65305, flown by 1Lt Marvin S Watkins. The Superfortress pilot later recalled, 'On the way back from bombing Tachiarai, I saw a kamikaze appearing suddenly from ahead when we were about 12-13 miles from the target. I thought it was our last, as the method of his attack was a suicide type. Our four gunners returned fire, but he hit us at a dead angle.' It is unlikely that Kasuya hit the bomber deliberately, as 343rd Kokutai pilots were never ordered nor instructed to ram. Nevertheless, the B-29 went down and Kasuya was killed. Of the 11-man crew in the bomber, only Watkins survived imprisonment.

The Shiden-Kai pilots continued their pursuit of the fleeing B-29s, with Lt Oshibuchi and his men taking it in turns to make head-on passes at the bombers. One of these naval aviators was PO1c Toru Kurita;

'Now each division was in a fighting formation. Ens [formerly WO] Ibusuki, my formation leader, pointed forward and started his attack. I, his No 3 man, followed him, catching the enemy bombers to the left that were ahead of us. We were 1500 m higher than the target aircraft. The distance was okay. I adjusted the axis of my aircraft to the target in an upside-down dive, going down vertically and pulling the stick gradually. The distance lessened – 1000 m, 800 m, 500 m. The target bomber rapidly increased in size and was about to stick out of the red ring on the reflector gunsight. Concentrated gunfire came towards me in unison from the bomber formation. Red tracers flew at me, right and left. I ducked in spite of myself. I continued to go in with my teeth set. I gripped the firing lever with all my might. Pushing forward on the stick, I started to float

upward, but my seatbelt held me down. I flashed by the stricken bomber so fast that I just caught a glimpse of the huge tail.'

Although the B-29 gunners were tracking Kurita, he skidded his aircraft to avoid the shells fired at him as he sped away from the bombers. Pulling gradually back on the control column whilst flying at almost 460 mph, he blacked out. When he recovered, Kurita began to climb back up for another pass;

'I climbed to take position at a higher altitude. I could see that things were being thrown out of a window of the B-29 that was spewing white smoke from the wing root. Very quickly, the smoke changed to flames. The bomber began to fall behind the formation and nose down. Two crewmen bailed out in succession.'

There were no survivors from B-29 42-93953.

On 7 May the 343rd Kokutai tangled with B-29s for the last time over Kyushu when 41 aircraft from the 313th BW again targeted four airfields used by kamikaze units. A solitary bomber (B-29 44-69887) was brought down by Lt Kanno, who was in overall command of aircraft from all three sento hikotai that sortied that day. Spotting ten bombers at 16,400 ft, the pilots dropped their belly tanks and climbed rapidly. Once above the B-29s, Kanno dived on 44-69887 and hit it in a wing root. The fighters in his division then made repeated passes on the bomber, setting three of its four engines on fire. Eleven-victory ace WO Mitsuo Hori delivered the final blow, diving on the aeroplane from above and concentrating his fire into the left wing of the doomed B-29. Moments later the Superfortress exploded, shedding part of the left wing in the process. Although two crewmen bailed out, none survived.

Two Shiden-Kais were lost during this mission, one of which accidentally collided with a bomber – the Superfortress made it back to base, however. Both IJNAF pilots successfully bailed out.

According to Capt Genda, between 17 April and 7 May the 343rd used a total of 120 Shiden-Kais against the B-29s, with pilots claiming 12 destroyed for the loss of three of their own. A further 22 groundcrew and one pilot were killed during raids on Kokubu, Matsuyama and Omura. Seven N1K2-Js had been lost in the air and 15 destroyed on the ground. Although the airfields on Kyushu had been all but destroyed by the B-29 offensive, morale amongst the 343rd Kokutai pilots remained high.

KAMIKAZE SUPPORT

The 343rd Kokutai was simultaneously tasked with flying B-29 interception missions and kamikaze escort during early May. On the 4th of the month Lt Oshibuchi led 36 Shiden-Kais aloft from Omura, bound for Amami Oshima. En route, the fighters passed small groups of slow-moving kamikaze aircraft silhouetted against the sea as they hugged the waves in order to avoid detection by US radar as they approached Okinawa. Commanding Sento 407th Hikotai on this mission was Lt Goro Ichimura, who recalled;

'As we arrived in the "killing zone", the squadron changed course slightly to the left toward the east and came out over the sea east of Amami Oshima. The formation then made a sweeping right turn and flew over Kikaiga Shima, at which point we spotted a dozen Hellcats orbiting.'



Having seen aerial combat over Rabaul, Lae, mainland China and off Formosa, CPO Mitsuo Hori was vastly experienced by the time he joined Sento 301st Hikotai. He subsequently claimed at least 3.5 kills with the Shiden-Kai, engaging Superfortresses, Hellcats, Corsairs and, possibly, FM-2 Wildcats

These aircraft were from VBF-12, embarked in USS *Randolph* (CV-15). They had just started to attack military targets on Kikaiga Shima when the 343rd arrived on the scene. Lt Oshibuchi ordered that belly tanks were to be dropped and that Sento 701st Hikotai and Sento 407th Hikotai were to follow him down in an attacking pass, while Sento 301st Hikotai provided top cover. Lt Ichimura was again leading Sento 407th Hikotai, and he subsequently recalled;

‘The Shiden-Kais spread out to form a fighting formation of two-aircraft sections. Immediately, I changed fuel supply from the drop tank to the main tank, pulling the drop lever hard. At the same time, the engine throttle was opened all the way, the gunsight was switched on and the four 20 mm guns were test fired. The combat flaps, of course, had already been charged to automatic. I was ready for combat. My brave wingmen to the right and left were nodding their heads imposingly with oxygen masks on. We were all prepared, only awaiting orders to go in.’

Battle soon ensued, with the IJNAF pilots forming up into two defensive Lufbery circles, from which they would peel off to make an attack and then return. Fighters from VF-9 soon joined the melee, and a number of N1K2-Js were claimed as shot down. The Shiden-Kai pilots soon ran low on fuel, as Lt Ichimura explained;

‘Time had come for the friendly fighters to form up again, at which point the 16 cover Shiden-Kais joined the fight from above. They dived and drove off the enemy aircraft by using typical formation attack tactics, one-sidedly destroying 12 aircraft. The dreadful attacking power of the Shiden-Kai was exhibited to the fullest. I looked down and saw a group of special attack aircraft heading south. I almost felt as if they were roaring forward toward us to thank us. We assembled one after another, worrying about our decreased fuel supply. After sending our farewell greetings to the strike group, who would not be coming back, we set course for Omura.’

Although Lt Ichimura believed that the 343rd had dealt a serious blow to the Hellcat units engaged by the kokutai (which claimed 13 kills), not a single F6F had in fact been downed – four had suffered repairable damage. Six Shiden-Kais failed to make it back to Omura. Again the US Navy’s excellent radio communication had been a key factor in the Hellcat pilots’ success, as had the tactics they had used – VBF-12 made ‘systematic passes from above, out of the sun’. Finally, the naval aviators were wearing ‘anti-blackout suits that allowed them to make manoeuvres that would have otherwise been impossible, such as continued high-speed turns’.

ATTACKING PBMs AND PB4Ys

As the war moved closer to Japan, long-range patrol aircraft began sinking tankers, freighters, fishing vessels and ferryboats with increasing regularity. Attacks by PBM Mariner flying boats and PB4Y-2 Privateer aircraft on vessels in the sea lanes of the Tsushima Strait and the Goto Islands became so frequent that in early May the commander of Sasebo Naval Base asked Capt Genda if the 343rd Kokutai could intervene.

On 3 and 5 May four Shiden-Kais were scrambled to intercept two PBMs that had been spotted near Onna Jima, although the flying boats escaped interception on both occasions. However, on 11 May, two more Mariners

from VPB-21, operating from the seaplane tender USS *Chandeleur* (AV-10), were initially engaged by an A6M2-N and then set upon by four Shiden-Kais from Sento 301st Hikotai northwest of Kyushu. At least three of the fighters were equipped with air-to-air rockets, four of which could be carried under each wing. Crude and erratic in comparison with the American High Velocity Aircraft Rocket that was used to great effect by Allied aeroplanes in the final year of the war, it had been developed by the Air Technical Arsenal at Yokosuka primarily for use against B-29 formations.

One of the fighters fitted with rockets on 11 May was the aircraft flown by division leader, Lt Masaji Matsumura, who later recalled, 'The rocket was a new weapon at the time, and all of us were interested in who would be the first to destroy an enemy with it.' Having spotted the two Mariners low over the water at a height of just 330 ft, the four N1K2-J pilots circled out of range for a few minutes before splitting up into two sections and coming in singly to attack. 'I pulled the firing lever but the rockets did not launch!' Matsumura explained. 'I tried again. Instead, the lever broke and fell onto the floor of the cockpit! I gave up and was going to fire my guns, but I had not time to use my gunsight. I was already turning to the right, ahead of the target aircraft, without firing.'

The only pilot to make a successful rocket attack on this occasion was CPO Sei-ichiro Sato, a veteran of combat over Rabaul, the Marianas and Formosa. Missing with his first pass (the rocket exploded far behind one of the Mariners), he hit PBM-5 BuNo 59031 just ahead of the tail turret. The resulting explosion peppered the port and starboard wings and the tail section with shrapnel holes, although the flying boat was able to make it back to *Chandeleur*. The second Mariner (BuNo 59046) was not so

A Shiden-Kai from Sento 301st Hikotai makes an attacking pass at a wildly manoeuvring PBM Marine from VPB-21 northwest of Kyushu on 11 May 1945. Two flying boats were intercepted by four N1K2-Js, three of which were equipped with air-to-air rockets. One of the Mariners was so badly damaged by 20 mm cannon fire that it had to ditch



fortunate, as a 20 mm shell had exploded in the cockpit and wounded both the pilot and co-pilot. Observing white smoke trailing from one of the flying boat's engines, Matumura was confident that the Mariner was finished and ordered his pilots to disengage and return to base. A short while later the PBM-5 was ditched with both engines out, its crew being rescued by another Mariner a short while later.

VPB-18 was the next Mariner unit to be engaged by the 343rd Kokutai, the squadron flying from the seaplane tender USS *St George* (AV-16). On 15 May, almost six hours into a patrol that had seen the flying boats attack three vessels, eight Shiden-Kais from Sento 701st Hikotai were scrambled under the command of ace Lt(jg) Akio Matsuba. Groping their way through bad weather for more than 30 minutes, as the fighters approached the Goto Islands Matsuba spotted two PBMs. 'It was a sudden encounter,' recalled CPO Takumi Sugitaki. 'Two flying boats were heading south at low altitude. At first, we had to chase the two Martins by making a steep turn, after which we attacked them from behind.'

The PBM flown by Lt(jg) Irving E Marr was hit hard, particularly by Matsuba and PO1c Nobumitsu Minoura, who made a head-on pass. The flying boat was struck in the cockpit and starboard engine, although Minoura's Shiden-Kai was in turn hit by fire from the bow gunner. Both aircraft crashed into the water moments later. Matsuba then turned his attention to the second Mariner, flown by Lt Marvin Hart. 'This one tried to escape by flying very low, skimming the surface of the sea,' noted the veteran ace. 'We attacked it from behind and above. I flew in parallel with the flying boat, giving orders and instructions to my men on the radio. Then a 12.7 mm bullet hit me from the side. Quickly, I stopped the bleeding by using my oxygen mask tube, but I had to return to base because of profuse bleeding from my foot.' This wound hospitalised the 18-victory ace until war's end.

'It was a fight just over the crest of the waves', recalled PO1c Toro Kurita. 'If you were careless in manipulating your aircraft you would dive in the water and be killed. It was very dangerous to make a run at very low level as if skimming the surface of the sea, but it was effective because we met with the least amount of enemy gunfire at this altitude.' The PBM ditched shortly thereafter, and ten of the flying boat's 13-man crew were eventually saved by the submarine USS *Ray* (SS-271).

The following day aircraft from Sento 407th Hikotai clashed with two Privateers from VPB-118 (based at Yontan airfield, on Okinawa) northeast of Gotō Rettō as the latter searched for the crew of a downed PBM. Anticipating that the US Navy would sortie patrol aircraft to scour the area of the previous day's action, the 343rd had eight fighters on standby. These were scrambled at 0820 hrs, with Lt Kanno leading the formation aloft. Although several passes were made on the heavily armed PB4Y-2s, neither aeroplane was shot down. A Shiden-Kai was, however, lost when CPO Tsuneo Ozeki's fighter stalled in after being hit.

On 17 May two more fighters were lost in a clash with two Privateers from VPB-109, on patrol from Yontan. PO2c Eiji Hoshino's Shiden-Kai exploded in mid-air, while the aircraft of CPO Tomeshiro Hiro went missing after attacking the PB4Y-2s. In a first for the 343rd, phosphorus 3-go anti-aircraft bombs were used – ten were dropped without success.

This was the last time that the kokutai clashed with US Navy patrol aircraft, the 343rd performing 16 interception sorties between 3 May and 1 June. Mariners and Privateers were engaged just four times, with Shiden-Kai pilots claiming two PBMs and a PB4Y destroyed, two PB4Ys as probables and one PBM damaged. In reality, one Mariner was shot down and two ditched, while a solitary flying boat and four Privateers were damaged. The 343rd lost four pilots and six aircraft during these clashes.

According to ace WO Mitsuo Hori of Sento 301st Hikotai, his division engaged FM-2 Wildcats that were escorting long-range patrol aircraft on 19 June, and he and his wingman downed two of the Grumman fighters. There are no other details of this action in the unit's records, however.

THUNDERBOLTS, CORSAIRS AND MUSTANGS

As American forces edged closer to the home islands, land-based single-engined fighters of the USAAF and US Marine Corps started to appear more frequently in the skies over western Japan. The 343rd clashed with these aircraft on a number of occasions in the final months of the war, starting on 28 May when the unit suffered badly at the hands of the P-47N Thunderbolt-equipped 19th FS/318th FG, flying from Ie Shima. Making its first foray over Japan on this date, 12 Thunderbolts from the unit had been strafing airfields on southern Kyushu when they were engaged from above by a formation of Shiden-Kais led by Lt Oshibuchi. Using water-injection to climb up and attack the Japanese fighters, the P-47N pilots were quickly above their opponents thanks to their fighters' superior performance at medium-to-high altitude.

A brief dogfight ensued, and when it had ended five N1K2-Js had been downed, three pilots killed and one wounded, despite the kokutai having initially had the advantage of height and the element of surprise. One of the pilots killed was CPO Takeo Yamada, who had claimed four victories flying a Shiden with Sento 401st Hikotai in defence of Formosa on 12 October 1944. He had failed to add to his tally since then. P-47N pilots claimed seven victories and two probables, whilst their counterparts in the 343rd were credited with four kills – in reality, not a single Thunderbolt had been hit. After the surviving pilots landed at Omura, Lt Oshibuchi reported that their opponents had been P-47s, which IJNAF pilots knew had superior performance at high altitude. Lt Cdr Shiga told the exasperated squadron leader, 'You should have pulled them down to a lower altitude and forced them into a dogfight.'

The 343rd enjoyed better fortunes on 2 June, when carrier-based Corsairs were attacked whilst again targeting kamikaze airfields on Kyushu. Capt Genda had modified the way in which he was employing his kokutai in response to these increasingly frequent strikes, as he noted in his post-war memoir;

'The enemy had overwhelming strength. Formations of about 30 aircraft would come in, one after another, within a short interval. It would not have been effective to have placed our squadron of only 20 or 30 aircraft in front of such large enemy waves, even though the Shiden-Kai group was the cream of the naval fighter force. If we had hit the first enemy group, we



WO Minoru Honda was credited with two victories in the Shiden-Kai, which took his overall tally to 17. Prior to joining the 343rd he had seen combat over New Guinea, the Solomons, as well as in the Philippines with Sento 407th Hikotai. He had helped his hikotai leader, Lt Hayashi, rebuild the latter unit following its return to Japan after the fall of the Philippines, remaining with the sento hikotai when it became part of the 343rd

would have been surrounded and slaughtered by other groups that would have followed in succession. Therefore, I thought it would be advantageous for us to attack the enemy's tail end group. Upon departure following the raid, its formation would be disorderly and its pilots would be in a mood to hurry home. It would take much more time for the preceding groups to come back to aid the tail end group being attacked by our fighters.'

Having been alerted of attacks on Chiran and Kagoshima airfields, Genda eventually scrambled 21 Shiden-Kais when the enemy fighters were reported near Kagoshima Bay. 'It took 35 to 45 minutes for our fighters to reach the southern tip of Kyushu', Genda noted. 'During that time they reached an altitude of 7000 m. I wanted our pilots to be in a good position when encountering the enemy aircraft. This was ideal, although we could not always do it like that on every occasion.'

Led for the first time by new Sento 407th Hikotai CO, Lt Keijiro Hayashi, the fighters dove headlong into a formation of 16 Corsairs from VF-85 and VBF-85 (both embarked in USS *Shangri-La* (CV-38)) that had been circling over several downed naval aviators in Kagoshima Bay. 'It was a complete surprise attack,' recalled Genda. 'The enemy aircraft had no means to cope with it. Most of them were unable to enter into an ordinary dogfight. Our Shiden-Kai glued themselves to the enemy's tails or dived at them and destroyed one after another. Enemy fighters flamed, wings flew off and spiralled down.'

Shortly thereafter, a second group of eight Corsairs that was also orbiting a downed pilot were attacked by Sento 301st Hikotai, which had been providing top cover for Sento 407th Hikotai and Sento 701st Hikotai. It appeared that these Corsair pilots were unaware of the plight of their squadronmates, Genda writing, 'If they had been alerted and joined in the combat, the situation might have changed. Sento 301st Hikotai rushed into the new group of eight Corsairs. The fight was as one-sided as the first one. Five aircraft were shot down.' The 343rd claimed no fewer than 18 victories following this engagement, 13 of them being credited to Sento 407th Hikotai – ace WO Minoru Honda was amongst the claimants from the latter unit. Two Shiden-Kai pilots were lost, this figure matching the claims submitted by VF-85. Between them, VF-85 and VBF-85 lost nine Corsairs to all causes, including fuel exhaustion and AAA.

According to the aircraft action report generated by Carrier Air Group 85, to which VF-85 and VBF-85 reported, the Corsair pilots were more than impressed with the calibre of their opponents, and their aircraft. 'The Japs were most aggressive and were experienced pilots. They made section passes and attacked only when they had the tactical advantage. The "George" [Allied reporting name for the Shiden-Kai] compared favourably with the Corsair in speed, had good diving characteristics and could outmanoeuvre it.'

On 22 June American forces at last secured Okinawa after more than ten weeks of bitter fighting. That same day, the final series of kamikaze raids was mounted on vessels offshore. Just 25 suicide aircraft could be mustered, and they were escorted by 50 Shiden-Kais (the entire airworthy force of the 343rd). No fewer than 19 fighters aborted the mission, however, due to deteriorating servicing and supply problems. The remaining aeroplanes, led by Lt Oshibuchi, headed south in the direction of Amami Oshima.



Northeast of the island, they would run into 18 Corsairs from Ie Shima-based VMF-113, flying a combat air patrol and on the lookout for kamikazes. The US Marine Corps pilots had encountered the latter several times before, and they had not put up much of a fight. Things would be different on this occasion, as the unit's aircraft action report indicated;

'The enemy aeroplanes and pilots engaged were by no means of the type usually encountered. Their aeroplanes were good and the pilots skilled and aggressive. A very good formation was flown and maintained. Deception was used by sending in one division as a decoy. The aeroplanes waiting above were grouped in four-aeroplane divisions, sections roughly abreast, and divisions stacked. They attacked by divisions.'

The 343rd claimed seven Corsairs destroyed for the loss of four pilots, including Sento 407th Hikotai CO Lt Keijiro Hayashi (who had downed an FG-1D shortly before his own demise). VMF-113 lost two aircraft and had three more badly damaged.

This mission signalled the end of the 343rd Kokutai's commitment to the ill-fated defence of Okinawa, the unit having participated in four of the ten Kikusui operations. The kokutai had claimed 46 victories during these long-range flights, and lost 29 pilots.

Corsairs and Shiden-Kais again clashed in large numbers on 2 July when VMF-224 and VMF-311 spotted 24 fighters flying along the east coast of Kyushu en route to Omura following an uneventful patrol. After the bombing of the Kawanishi plant at Naruo on 9 June, no attrition replacements had reached the kokutai – 24 fighters was the largest force it could muster. The top cover formation, provided by seven fighters from Sento 701st Hikotai, was bounced from above by both Corsair squadrons. Two Shiden-Kais were quickly shot down, while the remaining fighters scattered and fled for home. Sento 301st Hikotai and Sento 407th Hikotai were then attacked, and on this occasion the Japanese pilots fought back. Although he would 'make ace' during this action, Capt

A graphic demonstration of the destructive power of the Shiden-Kai's four 20 mm Type 99 Model 2 cannon. This VMF-113 Corsair, flown by 2Lt Alton Frazer, was photographed immediately upon its return to Ie Shima after a brutal clash with Sento 301st Hikotai CO, and 25-victory ace, Lt Naoshi Kanno on 22 June 1945. 'I began to notice that my left wing was disintegrating,' Frazer later recalled. 'I heard no shots, I heard no gunfire, but I became visually aware that my left wing was coming apart'

Joseph Lynch of VMF-224 almost became a victim himself towards the end of the clash when his fighter was hit in the right wing by an accurate burst of 20 mm cannon fire;

‘The wing became engulfed with flames and I remember choking from cordite fumes, which filled the cockpit and seeped right through my oxygen mask. The aeroplane went into a 45-degree dive and I slid the canopy back in order to bail out if I had to. As the aeroplane fell, the flames subsided and the fire went out.

‘The enemy pilots had flown good formations and made skilful runs, being aggressive and using very good tactics. I don’t know who they were or what unit they belonged to, but I’ll say this – they were among the very best fighter pilots that I ran into during the war. The Zero-sen pilots at Guadalcanal were skilled, tough and aggressive – at least the ones I faced were. The pilots over Kyushu on 2 July 1945 were every bit as good. They were tough customers.’

Eight Shiden-Kais were claimed to have been shot down by VMF-224 and VMF-311, although only half of this number had in fact been lost. Lynch’s fighter was the only American aircraft damaged in return, and its ‘demise’ was argued over by Lt Kanno and Ens Honda – fellow ace WO Mitsuo Hori witnessed the action, but he had been unable to identify which N1K2-J had made the attack.

On 5 July the 343rd encountered P-51D Mustangs for the first time when 13 examples from the 40th FS/35th FG, based at Ie Shima, were intercepted during a fighter sweep of Kyushu. Eight Shiden-Kais from Sento 701st Hikotai were scrambled, led aloft by combat veteran Lt Kazuchika Kinoshita. The latter split his aircraft into two divisions, with Kinoshita’s formation being bounced at a height of 8500 ft south of Sasebo. All four fighters in the division were shot down and three pilots, including Kinoshita, killed. The second division had escaped detection and was quickly ordered to land at nearby Oita, as Omura had come under a surprise attack by B-24s and the P-51 escorts shortly after the eight Shiden-Kais had been scrambled.

BUNGO STRAIT BATTLE

With Iwo Jima now in Allied hands, the fast carrier task force TF 38 turned its attention to the Japanese mainland. Supported in its efforts by the British Pacific Fleet, naval aircraft struck Tokyo, Hokkaido and Honshu between 10 and 18 July. At Omura, the 343rd’s ability to function effectively was also being steadily reduced as its airfield became the target of a sustained bombing campaign. ‘A B-24 group from the European Theatre was stationed at an Okinawan airfield, and it began coming to attack us almost every day,’ Capt Genda explained. ‘They would raid Omura after coming northward along the west coast of Kyushu and then making a 90-degree turn over Nishisonogi Peninsula. The frequent bombings by the B-24s coming from a relatively short distance had a great effect on the deterioration of our serviceability rate.’

The morale of the unit was boosted on 26 June by the arrival of legendary ace Ens Kaneyoshi Mutoh, who was transferred to Sento 301st Hikotai from the Yokosuka Kokutai. His place in the latter unit was taken by

fellow ace Ens Saburo Sakai. Upon reaching Omura, Mutoh was ordered by Genda to protect Lt Kanno. Having ‘made ace’ over China in 1937-38, Mutoh had subsequently seen action over the Philippines in 1941, the Solomons in 1942-43 and over Iwo Jima in 1944. As previously noted in this chapter, his name and deeds had achieved national prominence in February 1945 when, according to the Japanese press, Mutoh had taken on 12 Hellcats single-handedly in an early Shiden-Kai and downed four of them. His score stood at 27 victories when he joined the 343rd.

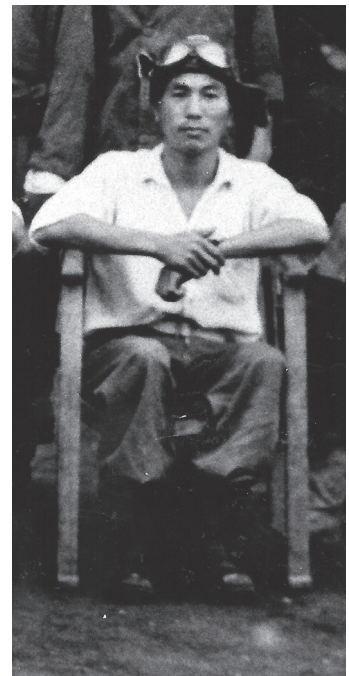
During the morning hours of 24 July, more than 500 carrier aircraft launched for strikes against Japanese vessels in Kure harbour. Against this mighty force, Capt Genda could only send 24 serviceable Shiden-Kais aloft. He knew that his best chance of success was to hit the enemy aircraft when they were heading back to their carriers, possibly with flak damage and definitely low on fuel. Shortly after 0900 hrs all three sento hikotai sortied fighters. ‘At the time, enemy groups of about 30 aircraft each were coming north for attacks on Kure and then going back in long columns,’ Capt Genda recalled. ‘Their movements were clearly known to us from the information sent from the air defence network. The only problem was to judge which formation we should attack with our Shiden-Kais. We needed to make a swift retreat after dealing a hard blow before we could be attacked by the next enemy formation.’

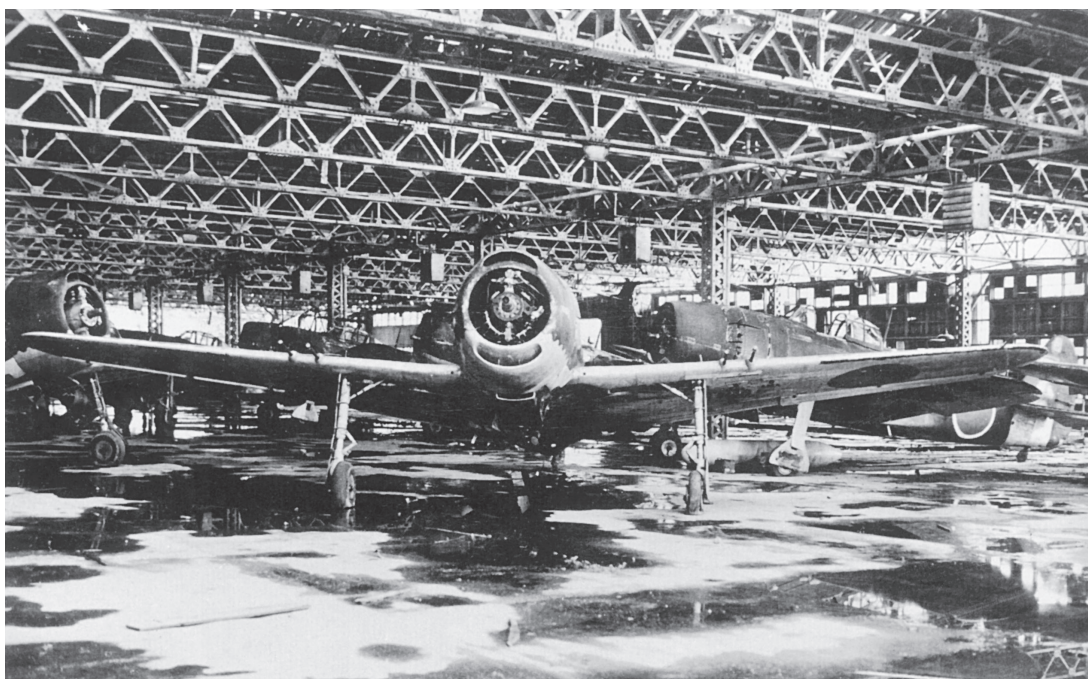
Lt Oshibuchi, leading the formation, circled around Cape Sata at almost 20,000 ft while receiving up-to-the-minute information and instructions from Capt Genda. Leading the other flight in his four-aircraft division was fellow ace Ens Kazuo Muranaka, a veteran of China, the Battle of Midway (on board *Hiryu*) and the Solomons (embarked in *Shokaku* and *Junyo*). Oshibuchi eventually headed south into the Bungo Strait, where, according to Lt Ryoichi Yamada, ‘Groups of enemy aircraft came into view like scattered sesame seeds! Gradually, they became large enough to be identified as enemy aircraft – about 250 of them. They continued to fly south in an orderly fashion as if they did not notice us.’

Ordering Sento 301st Hikotai to provide top cover, Oshibuchi then told the remaining pilots to attack immediately, singling out a group of fighters from USS *Bennington* (CV-20) some 10,000 ft below them. ‘Flying side-by-side with Lt Oshibuchi, I fired a first burst at an enemy aircraft during my first pass,’ Lt Yamada recalled. ‘I took my position again and started my second firing pass, seeing Lt Oshibuchi taking his position for his second pass. By this time the enemy formation had lost order. The fight became a melee as soon as the 301st directed its attack on an enemy group that approached in succession.’ Yamada’s wingman, CPO Masamori Ono, added, ‘As the enemy strength was overwhelming, our favourable position turned unfavourable very quickly, and we fell into a hard fight.’

Oshibuchi and Muranaka were both seen to down an enemy fighter, although the latter soon fell behind his leader due to a loose engine cover. After making three attacking passes, Oshibuchi then suffered damage to his engine from a burst of enemy fire. As he and his wingman, CPO Jiro Hatsushima, tried to flee the area, they ran headlong into the Hellcats of VF-49, heading back to USS *San Jacinto* (CVL-30). Hatsushima was soon shot down, and Lt(jg) Jack ‘Hoot’ Gibson closed on Oshibuchi’s fighter,

Ens Kazuo Muranaka, a veteran of China, the Battle of Midway (on board *Hiryu*) and the Solomons (embarked in *Shokaku* and *Junyo*), claimed his only victory with the Shiden-Kai during the Bungo Strait battle on 24 July. This took his final wartime tally to six kills and three probables





When American forces occupied Omura on 14 September they found 80 Shiden-Kais there. As this photograph inside one of the hangars clearly shows, in accordance with the surrender directives, the propellers and spinners had been carefully removed from all of the aircraft

which he saw was marked with two white bands around the fuselage aft of the cockpit – these indicated that the aircraft was flown by a flight leader;

‘The Jap tried to turn inside of me, but every time he started a turn I would fire a short burst in front of him that would always bring him back straight and level. I did a lot of hunting before the war and was involved in a lot of deflective shooting, which helped me with aerial gunnery. The estimated range of my opponent was right in the convergence zone of my guns, and where they converged was the lethal zone of machine guns on fixed-wing aeroplanes. When I got in effective range, my first burst knocked his wheels down, which decreased his speed tremendously. I overran him and had to pull up in a wing over to drop back on his tail. I had to drop my flaps and my landing gear to be able to stay a distance behind him so I could hit him with my machine guns. He then tried skidding turns, without success. By this time I began to get my bursts in the cockpit and he started to smoke. He fell over on one wing and went straight into the water, without burning.’

Lt Takashi Oshibuchi, six-victory ace and senior squadron commander of the 343rd Kokutai, crashed to his death near Mizunoko Shima.

By then all three squadrons in the kokutai had been engaged by US Navy fighters. Fellow ace WO Minoru Honda claimed an F6F for his 17th, and last, victory. ‘I approached an F6F from behind and above,’ the ace later recalled. ‘When I saw the head of the pilot, I felt a merciful heart but, in reality, I was engaged in a cold-blooded fight and I fired 20 rounds. The right wing of the enemy aircraft flew off and it went down in a spin.’ Moments earlier WO Mitsuo Hori had downed an FG-1D for his final kill, taking his tally to 11.

These successes were quickly tempered by the loss of Ens Mutoh, who was last seen fighting with a pair of Corsairs in an attempt to avenge

the loss of two pilots from his division. One of his opponents was Lt(jg) Robert M Applegate of VBF-1, flying from *Bennington*. He too had lost a wingman, Ens Robert Speckmann falling to WO Hori. With Applegate now seemingly at the mercy of the Shiden-Kais, he was saved by the timely arrival of two Hellcats from VF-88, embarked in USS *Yorktown* (CV-10). The F6F of Lt(jg) Kenneth Neyer was soon downed by WO Honda, however. The remaining Shiden-Kais, bar the aircraft flown by Mutoh, then broke off the fight, the ace making a head-on run at Applegate in his Corsair. They began firing at each other from a distance of 1000 ft, Applegate seeing his tracers hit the nose of the enemy fighter, although he felt the engine of his machine take some hits too. Both pilots stopped firing at 500 ft, having exhausted their ammunition. Applegate soon realised that his opponent intended to ram him. 'I pushed my aeroplane down, and we cleared each other by about ten feet. I saw the pilot slumped forward.'

The Shiden-Kai rolled over and down, and although Applegate attempted to follow, his Corsair was now struggling to stay in the air. No one saw Mutoh crash into the water. A short while later Applegate's engine seized and he bailed out – he was rescued by the submarine USS *Dragonet* (SS-293) the following morning. With the destruction of the Corsair, Mutoh had achieved acedom, albeit posthumously, in the Shiden-Kai.

The 343rd had lost six pilots, including two aces, during this fiercely fought engagement. In return, the kokutai had claimed 16 enemy aircraft shot down. TF 38 had lost 28 aircraft during this mission, although the majority of these had fallen to flak over Kure. However, at least three Corsairs and a Hellcat had been downed by the 343rd.

FINAL ACTIONS

Despite being subjected to near daily attacks at Omura, the pilots of the 343rd remained keen to get at the enemy whenever the opportunity arose. They would get the chance on 1 August when B-24s were detected approaching Kyushu. Around 20 Shiden-Kais were scrambled, armed with rockets and phosphorous bombs. As always, Lt Kanno was in the vanguard of the attack, and he led the aircraft towards the island of Yaku Shima, where bombers would assemble prior to heading for Kyushu. As the IJNAF fighters approached Yaku Shima, Kanno spotted two unescorted Liberators and alerted his pilots by radio to prepare for an attack.

Well acquainted with the B-24, Kanno favoured a head-on attack. During a frontal approach, the pilot would execute a quick roll and dive vertically at the target's nose. Most of Kanno's pilots hated this manoeuvre, but they had little choice but to follow their leader. Flying as his wingman on 1 August was ace WO Mitsuo Hori;

'Receiving his warning on the wireless, I watched the two B-24s and found another B-24 appearing to join up with them. Our lead aircraft headed straight for the enemy group. The B-24s were now in two formations of three and two aircraft, starting southward. All the turret guns were directed toward us. Our formation changed course about 50 degrees south and made its way in a descent to take a position forward of the enemy. Reaching left forward 1000 m distant from the B-24s, Lt Kanno glanced ahead and lowered the nose of his aeroplane, going in from ahead.

I followed him immediately. My target was the second aeroplane at the right end of the enemy formation. The five B-24s opened fire all at once. Red flames grazed the windshield of my aircraft.

'After making one pass, I dived out of range behind the enemy aircraft. Suddenly, I heard a radio call in a dive. "This is Kanno, No 1. My shell exploded in the barrel." Pulling up, I looked ahead, but my leader's aircraft was nowhere to be seen. I levelled my aircraft and looked around. He was not there. I banked and looked down, then I saw his aircraft flying level, far below me. I dived and followed him.'

Flying alongside Kanno, Hori could see the gaping hole in the wing and decided to escort him back to Omura. Kanno would have none of this, signalling at him from the cockpit to continue the attack on the bombers. Fifteen minutes later Hori made yet another vertical attack on the B-24s, although his aim was poor and he saw no hits.

Shortly after the 343rd had intercepted the bombers, four Mustangs from the 348th FG came to the B-24s' aid. Two of the fighters were flown by aces Lt Col William Dunham and Maj Edward Popek, and between them, the four USAAF pilots claimed four victories. Liberator gunners claimed two more kills. Three Shiden-Kai pilots were lost, including Lt Naoshi Kanno. He would be the last of four squadron leaders to be killed serving with the 343rd, and also the final ace to fall.

The kokutai's final large-scale engagement of the war came on 8 August, 48 hours after Hiroshima had been levelled by a solitary atomic bomb. XXI Bomber Command dispatched 245 B-29s, escorted by 100+ P-47s and P-51s, on a daylight firebombing mission to Yawata, Japan's steel-manufacturing centre. The 343rd managed to scramble 23 Shiden-Kais to oppose this raid, although these aircraft were soon overwhelmed by the Thunderbolt escorts. The 318th FG's mission report noted that the enemy fighters were 'dark green in colour, with a white diagonal stripe just aft of the canopy. They appeared new and could not be identified. Jap pilots seemed experienced and used excellent individual tactics. Their formation tactics were poor, however, and they scattered when tapped. They were not aggressive and avoided our fighters when possible.'

No fewer than nine Shiden-Kai pilots were killed and one seriously wounded. The 343rd claimed six fighters, a B-24 and a B-29 destroyed in return, the latter aircraft being Superfortress 42-63512, which was rammed by CPO Shigeo Suzuki. He was killed in the collision, and the bomber plunged into the sea east of Iki Shima. The 343rd had failed to thwart the raid on Yawata, 20 per cent of which was destroyed by fires caused by incendiary bombs.

The last dogfight involving the kokutai was fought on 12 August, when former Raiden pilot Lt Sadao Oshio took off to flight test one of the few remaining airworthy Shiden-Kais at Omura. Unfortunately for Oshio, his flight commenced just as 1Lt Kermit Allen of the 460th FS/348th FG was approaching the airfield at 11,000 ft during a sweep of the area. The squadron's mission report for the one-sided engagement that ensued read as follows;

'He [Allen] opened the attack, closing rapidly to 200 yards dead astern and a burst was fired, scoring hits on the belly tank. The explosion tore the belly tank from the aircraft. The "George" split-essed and made a tight



turn, using flaps. Staying with the Jap and still at 200 yards, Lt Allen fired again on an 80-30-degree deflection shot, scoring hits on the cockpit. The “George” split-essed once more, recovering momentarily on the deck while trailing heavy smoke. Then he suddenly snapped and split-essed into the water. He did not explode.’

On 15 August Emperor Hirohito’s surrender speech was broadcast live over loudspeakers at Omura, Capt Genda having assembled all personnel to listen to the address. Later that same day Lt Cdr Shiga led all airworthy Shiden-Kais (18 aircraft) aloft for one last flight in the immediate vicinity of Omura. By war’s end the 343rd Kokutai had claimed more than 170 victories in five months of combat at a cost of 82 pilots killed and 14 wounded. A further 21 naval aviators had been lost in flying accidents.

American forces finally occupied Omura on 14 September, with VMF-113 flying its Corsairs in from Okinawa nine days later. The following month six N1K2-Js were restored to airworthiness and flown by former 343rd pilots to test their suitability for shipping to the USA for further evaluation. Three examples were eventually flown to Yokosuka and then sent as deck cargo (with other captured Japanese aircraft) onboard an escort carrier to Norfolk, Virginia.

In October six N1K2-Js were restored to airworthiness and flown by former 343rd pilots (including Lt Cdr Shiga) to test their suitability for shipping to the USA for further evaluation. Three examples were eventually flown to Yokosuka – those aircraft are seen here fitted with drop tanks for the ferry flight – and then sent as deck cargo (with other captured Japanese aircraft) onboard an escort carrier to Norfolk, Virginia

APPENDICES

ACES WHO FLEW J2M RAIDENS, N1K1 KYOFU, N1K1-J SHIDENS AND/OR N1K2-J SHIDEN-KAIS

Name (surname first)	Total Victories	J2M/N1K1/N1K1-J/N1K2-J Victories	Unit/s
Akamatsu, Sadaaki	27	2.5	302nd Kokutai
Fujita, Iyozo	13	0	301st/341st Kokutai
Hagiri, Matsuo	13	1	Yokosuka Kokutai
Hayashi, Yoshishige	5	1	343rd Kokutai
Hirakawa, Hideo	5	5	341st Kokutai
Honda, Minoru	17	2	343rd Kokutai
Hori, Mitsuo	11	3.5	343rd Kokutai
Ishida, Teigo	9	0	332nd/343rd Kokutai
Ishihara, Susumu	16	0	332nd Kokutai
Isozaki, Chitoshi	12	0	302nd/343rd Kokutai
Kanno, Naoshi	25	4	343rd Kokutai
Kasai, Tomokazu	10	0	343rd Kokutai
Katoh, Katsue	9	9	343rd Kokutai
Katsuki, Kiyomi	8	1	934th/352nd Kokutai
Masuyama, Masao	17	0	Air Arsenal
Matsuba, Akio	18	4	301st/701st Hikotai/343rd Kokutai
Miyazaki, Isamu	13	0	343rd Kokutai
Muranaka, Kazuo	6	1	343rd Kokutai
Mutoh, Kaneyoshi	28	8	Yokosuka/343rd Kokutai
Nakamura, Yoshio	9	1	302nd/343rd Kokutai
Oh-hara, Ryoji	16	0	Yokosuka Kokutai
Oshibuchi, Takashi	6	2	343rd Kokutai
Sakai, Saburo	64	0	343rd/Yokosuka Kokutai
Sasakibara, Masao	12	1	1001st/343rd Kokutai
Shirane, Ayao	9	0	341st Kokutai
Sugita, Shoichi	70	7	343rd Kokutai
Tsuboi, Yozo	5.5	5.5	302nd Kokutai

COLOUR PLATES

1

J2M3 Raiden 21 '1195' of Lt(jg) Sadaaki Akamatsu, 302nd Kokutai, Atsugi, April 1945

Veteran ace Sadaaki Akamatsu was almost certainly at the controls of this aircraft when he claimed to have downed two P-51s from the 15th FG during a low altitude engagement near Atsugi on 19 April 1945. The fighter was adorned with two yellow chrysanthemums on its fin tip to denote Akamatsu's Mustang victories. The aircraft also had a yellow flight leader's stripe applied to its rear fuselage.

2

J2M2 Raiden 11 '32-101' of CPO Akeshi Ochi, 332nd Kokutai, Naruo, December 1944

A veteran of combat over Rabaul and Iwo Jima, CPO Ochi was credited with the destruction of a B-29 in this aircraft on 22 December 1944 during a bombing raid on the Mitsubishi aircraft plant in Nagoya. Only a handful of Superfortresses were destroyed by Raidens, this particular kill being the first credited to the 332nd Kokutai.

3

J2M3 Raiden 21 '352-20' of Lt(jg) Yoshihiro Aoki, 352nd Kokutai, Omura, March 1945

Officially known as the Navy Interceptor Fighter Thunderbolt (Raiden) in IJNAF service, the J2M was rarely seen in anything but standard late war colours. However, at least two J2M3s serving with the 352nd Kokutai were adorned with 'thunderbolt' markings inspired by the fighter's name. This example was flown by Lt(jg) Yoshihiro Aoki, who led seven Raidens (all of its serviceable J2Ms) to Kanoya in late April to help defend Kyushu.

4

J2M3 Raiden 21 '152' of Lt Susumu Itoh, 302nd Kokutai, Atsugi, April 1945

A veteran floatplane pilot, Susumu Itoh seamlessly switched to fighters in 1944 and eventually flew Raidens with the 302nd Kokutai. He led 17 aircraft from the unit to Kanoya to serve with the combined 'Tornado' kokutai, Itoh subsequently participating in all the bomber interception missions flown by the unit from the airfield.

He claimed two B-29s destroyed and three damaged during this period of intense action, these successes being represented by victory symbols on the tail of his Raiden. The fighter also has a flight leader's stripe on its rear fuselage.

5

J2M3 Raiden 21 '32-112' of WO Susumu Ishihara, 332nd Kokutai, Kanoya, April 1945

Ace Susumu Ishihara already had 16 victories to his name when he joined the 332nd shortly after its formation in the late summer of 1944. He would not add to his tally with the Raiden, although the veteran pilot was credited with damaging three B-29s whilst flying from Kanoya in this rather nondescript J2M3.

6

J2M3 Raiden 21 '32-190' of Lt Kohei Nakajima, 332nd Kokutai, Kanoya, April 1945

Most of the 332nd Kokutai's Raidens were uniformly drab in appearance, including this aircraft of Lt Kohei Nakajima. Although not an ace, Nakajima was credited with the destruction of two B-29s. The second of these victories, on 27 April 1945, was the first success recorded by the 'Tornado' kokutai. Nakajima had led the 332nd's 17-strong contingent from Naruo to Kanoya just 48 hours earlier.

7

J2M3 Raiden 21 '1183' (pilot unknown) of the 302nd Kokutai, Atsugi, February 1945

Assigned to a flight commander and boasting victory and damaged symbols on its fin, this aircraft was one of several J2M3s fitted with a single 20 mm cannon mounted obliquely within the left side of the fuselage near the cockpit as per orders issued by the CO of the kokutai, Capt Yasuna Kozono. This may well have been the fighter used by 1st Buntai leader Lt Junro Teramura on 10 February 1945 to claim the 302nd's first Raiden victory, the pilot managing to hit a B-29 in one of its engines with rounds from the angled weapon. Teramura then attacked the bomber with his wing guns, exhausting his ammunition as he sent the aeroplane down.

8

N1K1-J Shiden 11 '3' of CPO Tomeshiro Hiro, Tsukuba Kokutai, Tsukuba, February 1945

Assigned to the Tsukuba Kokutai as a training aircraft for would-be Shiden pilots, this aircraft saw combat with CPO Tomeshiro Hiro at the controls on 16 February 1945 when US Navy carrier aircraft attacked the Kanto Plain for the first time. Hiro, who was later killed flying with the 343rd Kokutai, was credited with damaging an F6F when the mixed Tsukuba Kokutai formations of Zero-sens and Shidens clashed with the US Navy fighters.

9

N1K1-J Shiden 11 '1155' (pilot unknown) of the Yatabe Kokutai, Tsukuba, early 1945

This aircraft, which features a Katakana 'Ya' symbol on its fin, was one of a small number of Shidens flown by the Yatabe Kokutai in its capacity as a training unit for would-be fighter pilots. J2Ms were also assigned to the kokutai at this time. As with their counterparts in the co-located Tsukuba Kokutai, instructors from the Yatabe Kokutai flew missions in the Shidens against marauding US Navy

aircraft over the Kanto Plain in February 1945. None of them claimed any victories, however.

10

N1K1-J Shiden 11 '341S-12' (pilot unknown) of the 341st Kokutai, Marcott, Luzon, late October 1944

The 341st Kokutai was the first frontline unit in the IJNAF to be issued with the Shiden, this particular aircraft being assigned to Sento 401st Hikotai. Rushed into action in October in defence of the Philippines, the 341st (which also flew Zero-sens) operated primarily from Marcott – part of the Clark Field complex – on Luzon. Although the kokutai produced the only Shiden ace (PO1c Hideo Hirakawa) and claimed a number of victories over the Philippines, the 341st had been wiped out by early January 1945.

11

N1K2-J Shiden-Kai 21 '343-B-17' of LA Ikuji Matsumura, 343rd Kokutai, Kokubu No 1, April 1945

This aircraft was flown by LA Matsumura during the 343rd's baptism of fire on 19 March 1945, although there is no mention of him claiming any victories on this date in various accounts of the day's action. Assigned to Sento 407th Hikotai, the fighter participated in a B-29 intercept mission on 21 April, with CPO Hisamitsu Watanabe at the controls. Victory markings, such as those seen here on this aircraft, were applied to raise morale. Since the IJNAF did not recognise nor award individual credit, and enlisted pilots such as Matsumura and Watanabe did not have assigned aircraft, it meant that the fighter recorded the victory, not the pilot. Victory markings took the shape of silhouettes of the enemy aircraft downed.

12

N1K2-J Shiden-Kai 21 '343-A-02' of Lt Masaji Matsumura, 343rd Kokutai, Matsuyama, March 1945

Issued to the 343rd in late February, this aircraft was flown by Sento 301st Hikotai pilot Lt Masaji Matsumura on the Tokko escort mission to Amami Oshima and Kikaiga Shima on 12 April 1945. He claimed one victory, and then had to make an emergency landing at Tanega Shima when he ran low on fuel during the return leg of the mission. An American fighter had followed Matsumura to the airfield, strafing '343-A-02' and damaging it. Subsequently repaired, the fighter was lost with CPO Katsue Katoh at the controls during the next mission to Kikaiga Shima on 16 April. The ranking Shiden-Kai ace, Katoh had claimed nine victories following the 343rd Kokutai's 19 March combat debut.

13

N1K2-Ja Shiden-Kai 21a '343-A-11' of CPO Shoichi Sugita, 343rd Kokutai, Matsuyama, March 1945

One of only a handful of 'small tail' N1K2-Jas (which could be fitted with underwing bomb racks) issued to the 343rd, this aircraft was flown on a number of occasions by CPO Shoichi Sugita. The highest-scoring ace to serve with the kokutai, he was credited with seven Shiden-Kai victories prior to his death in combat on 15 April. It is unclear whether he claimed any kills in this machine.

14

N1K2-J Shiden-Kai 21 '343-A-11' of CPO Shoichi Sugita, 343rd Kokutai, Kanoya, early April 1945

The '343-A-11' seen in the previous profile was apparently replaced by this 'big tail' Shiden-Kai shortly before Sento 301st Hikotai was

transferred to Kanoya in early April. The aeroplane outlasted Sugita, being flown operationally by Lts Masaji Matsumura (on 16 April) and Naoshi Kanno (on 21 May). Appropriately marked with the diagonal yellow band of a buntai leader (squadron commanders' aircraft were adorned with two such bands), this Shiden-Kai also boasted no fewer than 16 victory silhouettes.

15

N1K2-J Shiden-Kai 21 '343-A-33' of CPO Mitsuo Hori, 343rd Kokutai, Kanoya, early April 1945

Lacking any distinctive markings aside from its tail code, this aircraft was occasionally flown by Sento 301st Hikotai 11-victory ace CPO Mitsuo Hori. He claimed at least 3.5 kills with the Shiden-Kai, engaging Superfortresses, Hellcats, Corsairs and, possibly, FM-2 Wildcats.

16

N1K2-Ja Shiden-Kai 21a '104' of WO Kaneyoshi Mutoh, Yokosuka Kokutai, Oppama, February 1945

One of only three pilots to claim five or more victories with the Shiden-Kai, veteran ace WO Kaneyoshi Mutoh was also the only naval aviator to achieve this feat with a unit other than the 343rd Kokutai. Assigned to the Yokosuka Kokutai, he claimed four F6Fs destroyed on 16 February and a P-51 on 12 April. Amongst the aeroplanes he flew during his long spell with the kokutai was this early-production 'small tail' N1K2-Ja.

17

N1K2-J Shiden-Kai 21 '343-A-15' of Lt Naoshi Kanno, 343rd Kokutai, Matsuyama, early April 1945

Choosing this aircraft as his personal mount, Naoshi Kanno ordered his crew chief to paint two diagonal bands on its fuselage in the hope that they would attract enemy fighters to him so that he could in turn shoot them down. The large white numbers seen within the hinomaru were applied to aircraft for training purposes, providing a visual aid for new pilots working towards full operational status. Hand-applied using water-soluble paint, these numbers were, in the main, removed once the 343rd was fully committed to the Okinawa campaign.

18

N1K2-Ja Shiden-Kai 21a '343-B-27' of WO Isamu Miyazaki, 343rd Kokutai, Omura, May 1945

The vast majority of JAAF and IJNAF combat types suffered from heavy weathering in the final months of the war, the glossy dark green/olive finish liberally peeling away after only a few weeks in the frontline. This 'small tail' Shiden-Kai, flown by ace Isamu Miyazaki, was particularly badly affected. The squadron/buntai leader stripe(s) on aircraft assigned to Sento 407th Hikotai and Sento 701st Hikotai was applied white.

19

N1K2-J Shiden-Kai 21 '343-A-22' of CPO Tomokazu Kasai, 343rd Kokutai, Kanoya, April 1945

CPO Tomokazu Kasai had flown as wingman to Shoichi Sugita during their time together in the 201st Kokutai, and the latter had made

sure that the ten-victory ace was transferred to the 343rd Kokutai too. Following Sugita's death, Kasai flew as wingman to Lt Kanno. The 343rd used the Roman alphabet to differentiate aircraft of its three fighter squadrons, with the letter A being used by Sento 301st Hikotai, the letter B applied to Shiden-Kais of the Sento 407th Hikotai and the letter C used on aeroplanes of Sento 701st Hikotai. The squadron letter was always applied at the tip of the tail, sometimes on the fin but usually on the rudder.

20

N1K2-J Shiden-Kai 21 '343-A-37' of WO Isamu Miyazaki, 343rd Kokutai, Matsuyama, March 1945

WO Miyazaki was initially issued with this 'big tail' Shiden-Kai when he was transferred from the 252nd Kokutai to the 343rd Kokutai in January 1945. Despite subsequently seeing plenty of action, he failed to add to his tally of 13 kills.

21

N1K2-J Shiden-Kai 21 '343-B-43' of CPO Teigo Ishida, 343rd Kokutai, Kokubu No 1, April 1945

Nine-victory ace Teigo Ishida was posted to the 343rd Kokutai from the 332nd Kokutai, where he had flown both Zero-sens and Raidens. He was lost, possibly in this aircraft, during his very first mission with Sento 407th Hikotai on 16 April 1945 when the unit was bounced from above and behind by Hellcats from VF-17.

22

N1K2-J Shiden-Kai 21 '343-A-15' of Lt Naoshi Kanno, 343rd Kokutai, Omura, May 1945

Also the subject of profile 17, '343-A-15' had all but lost the white 15 within its hinomaru and gained five victory silhouettes – three B-29s and two fighters, although Kanno was only credited with four victories whilst assigned to the 343rd – by late May. He flew this aircraft on the long-range missions to Amami Oshima and Kikaiga Shima on 12 and 16 April and then again on 16 May when hunting, unsuccessfully, for Mariner flying boats.

23

N1K2-J Shiden-Kai 21 '343-B-03' of WO Hiroshi Oh-hara, 343rd Kokutai, Omura, Kokubu No 1, April 1945

Marked with a buntai leader's stripe, this aircraft was supposed to have been flown by WO Oh-hara on the 16 April Tokko escort mission to Amami Oshima and Kikaiga Shima. However, he was forced to abort his takeoff when the fighter's Homare engine refused to run properly. Oh-hara was seriously injured on 12 May when he suffered an in-flight engine failure in another Shiden-Kai.

24

N1K2-J Shiden-Kai 21 '343-C-45' of Lt Takashi Oshibuchi, 343rd Kokutai, Omura, May 1945

Ace Lt Oshibuchi was CO of Sento 701st Hikotai and overall commander of the 343rd Kokutai when on operations. His aircraft was marked with squadron leader's stripes, and it is also depicted here armed with 60 kg No 27 aerial burst rockets. Oshibuchi used this weapon for the first time – with little success – when attacking B-29s over Kyushu on 5 May.

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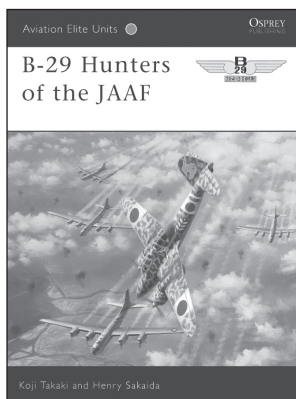
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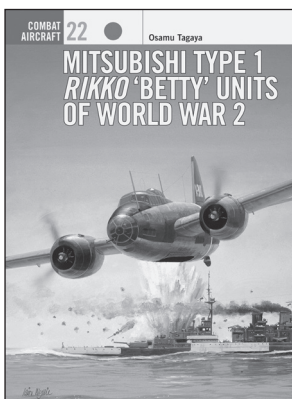
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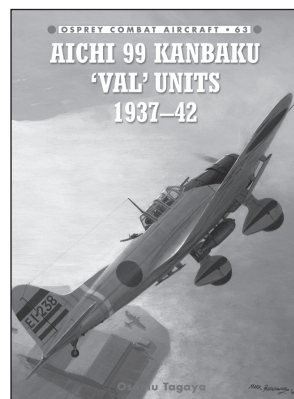
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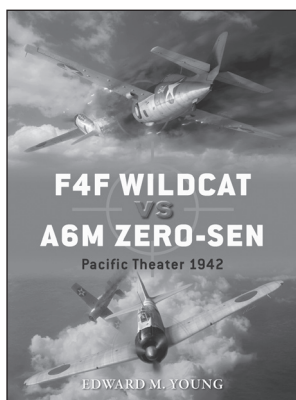
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